

COPY

Glaser Weil Fink Jacobs
Howard Avchen & Shapiro LLP

1 ADRIAN M. PRUETZ - State Bar No. 118215
apruetz@glaserweil.com
2 ERICA J. VAN LOON - State Bar No. 227712
evanloon@glaserweil.com
3 LAUREN GIBBS - State Bar No. 251569
lgibbs@glaserweil.com
4 GLASER WEIL FINK JACOBS
HOWARD AVCHEN & SHAPIRO LLP
5 10250 Constellation Boulevard, 19th Floor
Los Angeles, California 90067
6 Telephone: (310) 553-3000
Facsimile: (310) 556-2920

7 Attorneys for Plaintiff
8 Wausau Paper Towel & Tissue, LLC

9 UNITED STATES DISTRICT COURT
10 CENTRAL DISTRICT OF CALIFORNIA
11 WESTERN DIVISION

12 WAUSAU PAPER TOWEL &
13 TISSUE, LLC, a Wisconsin limited
liability company,

14 Plaintiff,

15 v.

16 TEH TUNG CORPORATION, a
17 California corporation,

18 Defendant.

CV 12-06041 JAK (AGP)

COMPLAINT FOR PATENT
INFRINGEMENT

[JURY TRIAL DEMANDED]

FILED
12 JUL 13 AM 11:05
CLERK OF DISTRICT COURT
CENTRAL DISTRICT OF CALIF.
LOS ANGELES

Plaintiff, Wausau Paper Towel & Tissue, LLC, alleges as follows:

JURISDICTION AND VENUE

1. This is a case for patent infringement arising under the Acts of Congress relating to patents, 35 U.S.C. §§ 271; 282-285. This Court has jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).

2. Jurisdiction is proper because, on information and belief, Defendant transacts business in this judicial district including the sales and offering for sale of its products, has committed acts of infringement in this judicial district and Defendant has sufficient contacts with this judicial district to subject itself to the jurisdiction of this Court.

3. Venue is proper in this district under 28 U.S.C. § 1391(b) and (c) and 28 U.S.C. § 1400(b).

THE PARTIES

4. Plaintiff, Wausau Paper Towel & Tissue, LLC ("Wausau"), is a limited liability company organized and existing under the laws of Wisconsin and having a principal place of business at 100 Paper Place, Mosinee, Wisconsin.

5. On information and belief, Defendant, Teh Tung Corporation ("Teh Tung"), is a corporation organized and existing under the laws of California and having a principal place of business at 12110 Altamar Place, Santa Fe Springs, California 90670.

BACKGROUND

6. Wausau is engaged in the business of manufacturing and selling various paper towel and tissue products, including paper roll products, to customers around the world.

7. On December 10, 2002, United States Patent No. 6,491,251 ("the '251 patent"), entitled "Double Core Tissue Roll, Dispenser and Method" was duly and legally issued to Wausau as an assignee of the inventors, Mark Harrison Stanland,

1 Steven M. Slye, Douglas E. Bagan, Alain P. Cotnoir, Randy A. Baughman, and Adam
2 T. Elliott.

3 8. Wausau is the owner of the entire right, title and interest in and to the
4 '251 patent, and has been and continues to be the owner. A copy of the '251 patent is
5 attached as Exhibit A.

6 9. On November 18, 2003, United States Patent No. 6,648,267 ("the '267
7 patent"), entitled "Double Core Tissue Roll, Dispenser and Method" was duly and
8 legally issued to Wausau as an assignee of the inventors, Mark Harrison Stanland,
9 Steven M. Slye, Douglas E. Bagan, Alain P. Cotnoir, Randy A. Baughman, and Adam
10 T. Elliott.

11 10. Wausau is the owner of the entire right, title and interest in and to the
12 '267 patent, and has been and continues to be the owner. A copy of the '267 patent is
13 attached as Exhibit B.

14 11. These patents are directed at paper roll products with spaced core
15 sections, including a process for making paper roll products with spaced core
16 sections.

17 12. Teh Tung is engaged in the business of importing, using, selling and
18 offering for sale paper roll products with spaced core sections. On information and
19 belief, Teh Tung purposefully imports paper roll products with spaced core sections
20 from abroad and sells them throughout the United States. Photographs of a sample
21 accused paper roll product with spaced core sections, branded "Virgin Toilet Tissue,"
22 is attached hereto as Exhibit C.

23 13. On information and belief, the paper roll products with spaced core
24 sections are made by unlawfully performing the claimed processes as disclosed in the
25 '251 and '267 patents.

26 14. On information and belief, Teh Tung purchases and imports the paper
27 roll products with spaced core sections manufactured by practicing the claimed
28

Glaser Weil Fink Jacobs
Howard Avchen & Shapiro LLP

1 processes in the '251 and '267 patents outside the United States and without
2 permission from Wausau.

3 15. On information and belief, the foreign manufacturer's activities would
4 directly infringe, contribute to the infringement of, and/or induce infringement of the
5 '251 and '267 patents through the performance of the claimed process in the United
6 States.

7 **COUNT I - INFRINGEMENT OF U.S. PATENT NO. 6,491,251**

8 16. Wausau restates the allegations set forth in paragraphs 1-15 and
9 incorporate them herein by reference.

10 17. By virtue of its ownership of the '251 patent, Wausau maintains the right
11 to sue thereon and the right to recover for infringement thereof.

12 18. On information and belief, Teh Tung has imported, sold and/or used,
13 without Wausau's consent, paper roll products with spaced core sections that are
14 made by practicing the claimed invention of the '251 patent outside the United States.
15 The importation of an article made by an infringing process constitutes an act of
16 infringement under Section 271(g).

17 19. On information and belief, a foreign entity manufactures the paper roll
18 products with spaced core sections abroad by using the claimed process of the '251
19 patent outside the United States.

20 20. On information and belief, Teh Tung purchases, uses and/or sells paper
21 roll products with spaced core sections manufactured outside the United States using
22 the claimed processes of the '251 patent.

23 21. On information and belief, the products made using the patented process
24 abroad are neither materially changed by subsequent process nor do they constitute a
25 trivial and nonessential component of another product.

26 22. Wausau has complied with the notice provision of the patent statutes by
27 marking its packaging with the '251 patent.
28

23. Wausau has no adequate remedy for infringement because the use, offer to sell, and/or sale of the paper roll products with spaced core sections in the United States results from use of the claimed process infringing the '251 patent abroad.

24. Wausau has been damaged by Teh Tung's infringement of the '251 patent and will continue to be damaged in the future unless Teh Tung is permanently enjoined from infringing that patent.

25. Wausau has satisfied the notice provisions of 35 U.S.C. § 287.

INFRINGEMENT OF U.S. PATENT NO. 6,648,267

26. Wausau restates the allegations set forth in paragraphs 1-26 and incorporate them herein by reference.

27. By virtue of its ownership of the '267 patent, Wausau maintains the right to sue thereon and the right to recover for infringement thereof.

28. On information and belief, Teh Tung has imported, sold and/or used, without Wausau's consent, paper roll products with spaced core sections that are made by practicing the claimed invention of the '267 patent outside the United States. The importation of an article made by an infringing process constitutes an act of infringement under Section 271(g).

29. On information and belief, a foreign entity manufactures the paper roll products with spaced core sections abroad by using the claimed process of the '267 patent outside the United States.

30. On information and belief, Teh Tung purchases, uses and/or sells paper roll products with spaced core sections manufactured outside the United States using the claimed processes of the '267 patent.

31. On information and belief, the products made by performing the patented process abroad are not materially changed by subsequent process or constitute a trivial and nonessential component of another product.

32. Wausau has complied with the notice provision of the patent statutes by marking its packaging with the '267 patent.

34. Wausau has been damaged by Teh Tung's infringement of the '267 patent and will continue to be damaged in the future unless Teh Tung is permanently enjoined from infringing that patent.

PRAYER FOR RELIEF

A. United States Patent Nos. 6,491,251 and 6,648,267 were duly and legally issued, are valid and enforceable;

C. The Defendant Teh Tung Corporation, its officers, agents, servants and employees, and those persons in active concert or participating with it be enjoined from further infringing United States Patent Nos. 6,491,251 and 6,648,267;

E. The Defendant Teh Tung Corporation be permanently enjoined from continued use, importation, offer for sale, or sale of the products that infringe the patent-in-suit;

11

///

11

1 G. Plaintiff, Wausau Paper Towel & Tissue, LLC, be awarded such other
2 and further relief as this Court may deem necessary and proper.

3
4 DATED: July 12, 2012

GLASER WEIL FINK JACOBS
HOWARD AVCHEN & SHAPIRO LLP

5
6 By: Erica J. Van Loon
7 ADRIAN M. PRUETZ
8 ERICA J. VAN LOON
9 LAUREN GIBBS
Attorneys for Plaintiff
Wausau Paper Towel & Tissue, LLC

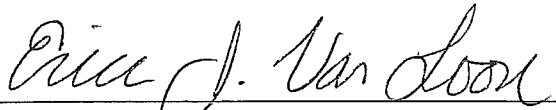
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
Glaser Weil Fink Jacobs
Howard Avchen & Shapiro LLP

DEMAND FOR JURY TRIAL

Plaintiff, Wausau Paper Towel & Tissue, LLC, hereby demands a trial by jury of all issues so triable.

DATED: July 12, 2012

GLASER WEIL FINK JACOBS
HOWARD AVCHEN & SHAPIRO LLP

By: 

ADRIAN M. PRUETZ

ERICA J. VAN LOON

LAUREN GIBBS

Attorneys for Plaintiff
Wausau Paper Towel & Tissue, LLC

Glaser Weil Fink Jacobs
Howard Avchen & Shapiro LLP

Exhibit A



US006491251B1

(12) **United States Patent**
Stanland et al.

(10) Patent No.: **US 6,491,251 B1**
(45) Date of Patent: **Dec. 10, 2002**

(54) **DOUBLE CORE TISSUE ROLL, DISPENSER AND METHOD**

(75) Inventors: Mark Harrison Stanland, Lexington, KY (US); Steven M. Slye, Harrodsburg, KY (US); Douglas E. Bagan, Harrodsburg, KY (US); Alain P. Cotnoir, Danville, KY (US); Randy A. Baughman, Harrodsburg, KY (US); Adam T. Elliott, Lexington, KY (US)

(73) Assignee: Bay West Paper Corporation, Harrodsburg, KY (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

3,294,329 A	12/1966	Tucker et al.	
3,381,909 A	5/1968	Tucker et al.	
3,387,902 A	6/1968	Perrin et al.	
3,433,355 A	3/1969	Smith	
3,437,388 A *	4/1969	Jespersen	242/596.7
3,650,487 A	3/1972	Bahnsen	
4,108,513 A	8/1978	Lander	
4,108,547 A *	8/1978	Stemmle	355/50
4,522,346 A	6/1985	Jespersen	
4,557,426 A	12/1985	Siciliano	
4,903,909 A *	2/1990	Suzuki	242/559.2
5,236,141 A	8/1993	Kewin	
5,310,129 A	5/1994	Whittington et al.	
5,605,001 A *	2/1997	Derk	40/518
5,636,812 A	6/1997	Conner et al.	
5,749,538 A	5/1998	Brown et al.	
5,829,713 A	11/1998	Kewin	
5,833,169 A	11/1998	Morand	

FOREIGN PATENT DOCUMENTS

GB	2245882	*	1/1992	242/559.2
NL	8602194	*	3/1988	242/559.2

* cited by examiner

Primary Examiner—Emmanuel M. Marcelo

(74) Attorney, Agent, or Firm—Merchant & Gould P.C.

(57)

ABSTRACT

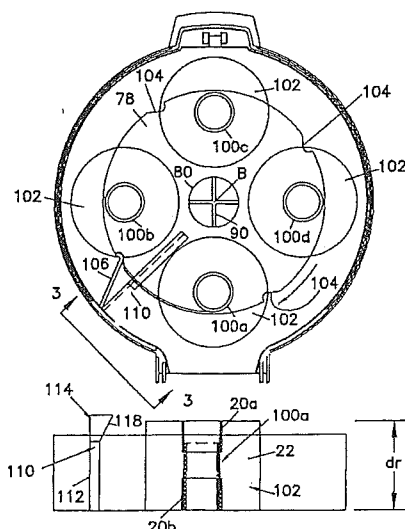
An improved web material dispenser that is designed to dispense web material, such as toilet tissue or the like. The dispenser is able to retain a roll containing tissue at a dispensing position until the tissue has been exhausted from the roll. The dispenser senses that the tissue is exhausted from the roll, and only then permits a reserve roll to be rotated into a dispensing position. Thus, the dispenser ensures that the tissue from each roll is used up before permitting access to a reserve roll. The invention also provides a new web material roll that utilizes a "double core", as well as a method of making the "double core".

21 Claims, 5 Drawing Sheets

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,108,855 A *	8/1914	Simons	242/600
1,716,812 A *	6/1929	Ball	242/559.2
2,299,626 A	10/1942	Hunt	
2,703,681 A *	3/1955	Jacobs	242/559.2
2,726,823 A	12/1955	Jespersen	
2,905,405 A	9/1959	Burton et al.	
3,084,006 A	4/1963	Roemer	
3,085,762 A *	4/1963	Subklew	242/559.2
3,126,234 A	3/1964	Batlas et al.	
3,211,504 A *	10/1965	Bump	242/560
3,214,014 A	10/1965	Perrin	

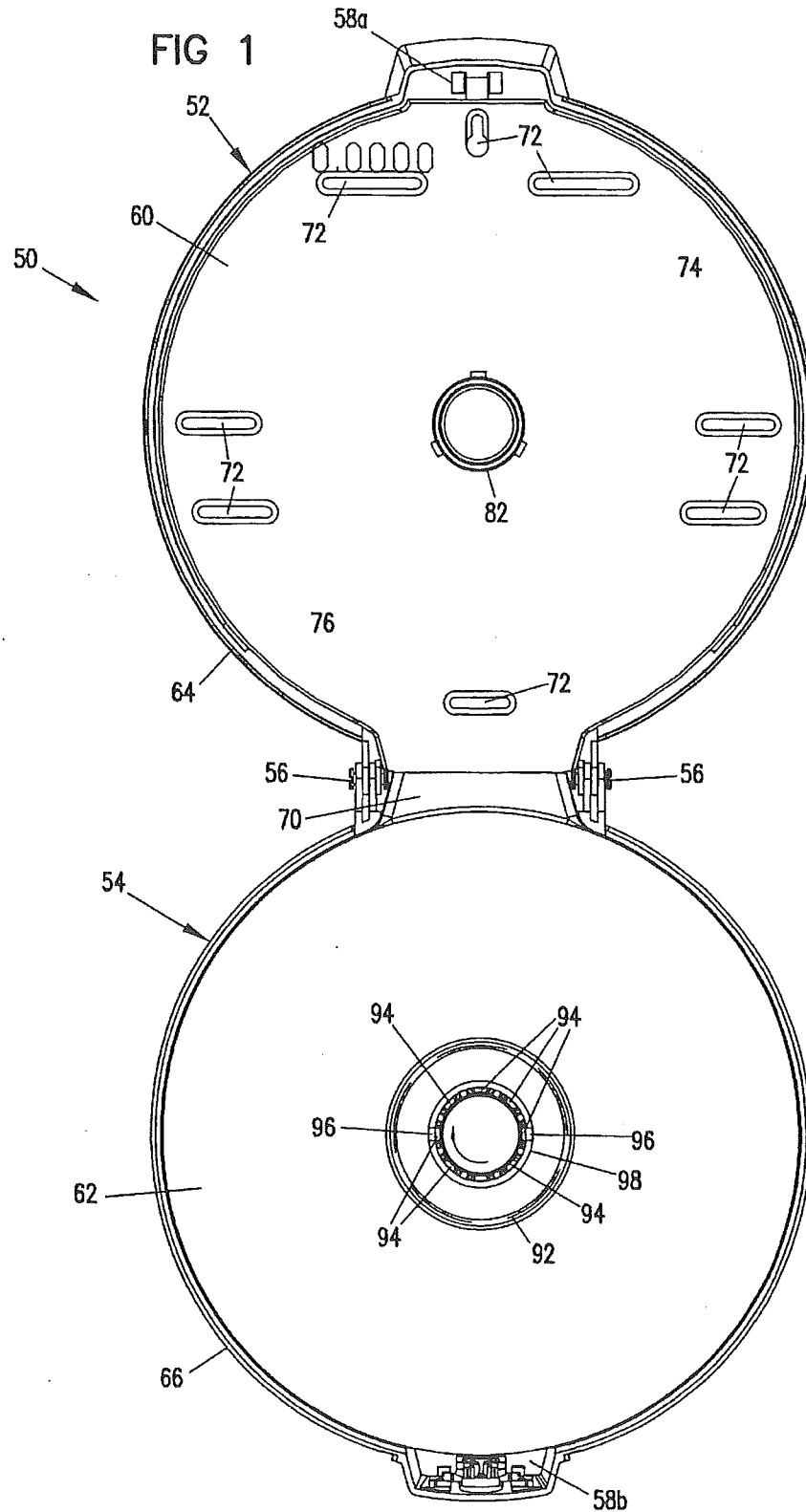


U.S. Patent

Dec. 10, 2002

Sheet 1 of 5

US 6,491,251 B1

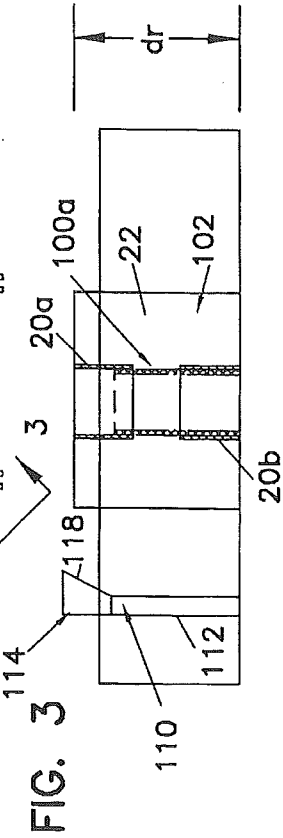
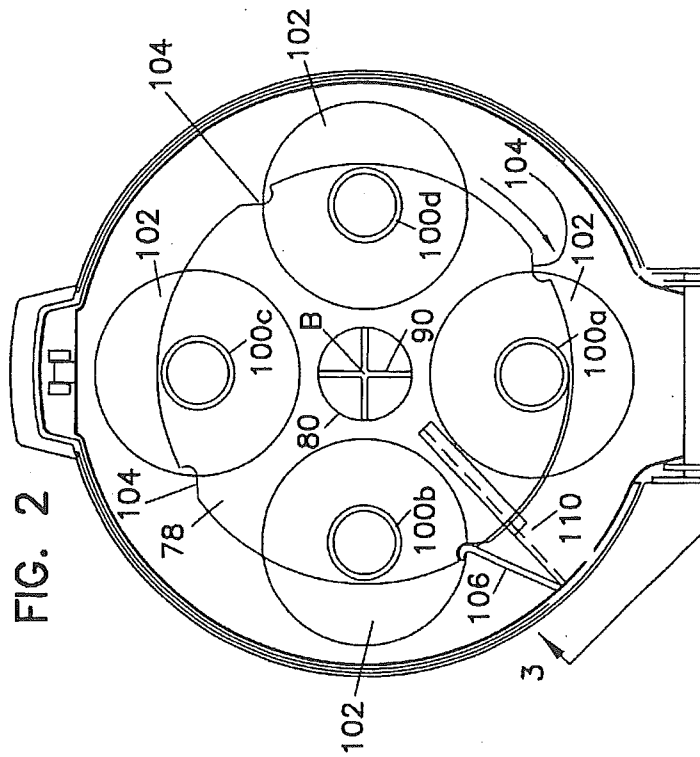
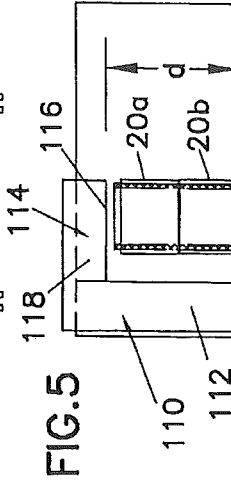
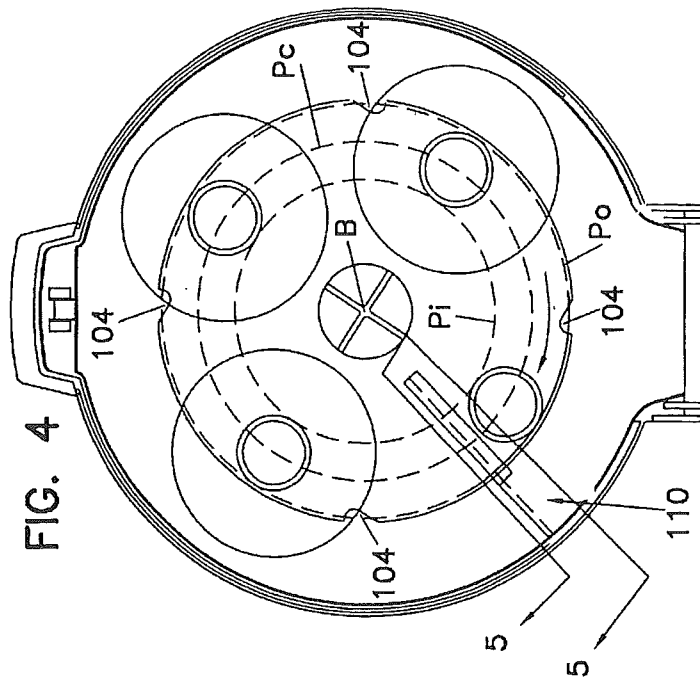


U.S. Patent

Dec. 10, 2002

Sheet 2 of 5

US 6,491,251 B1

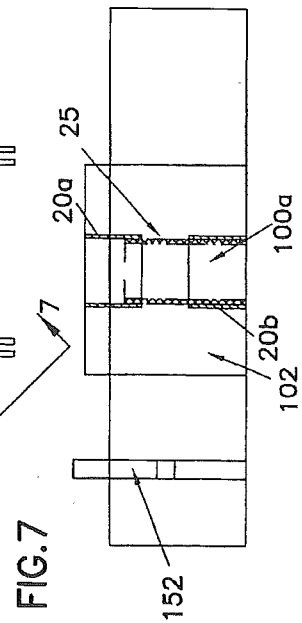
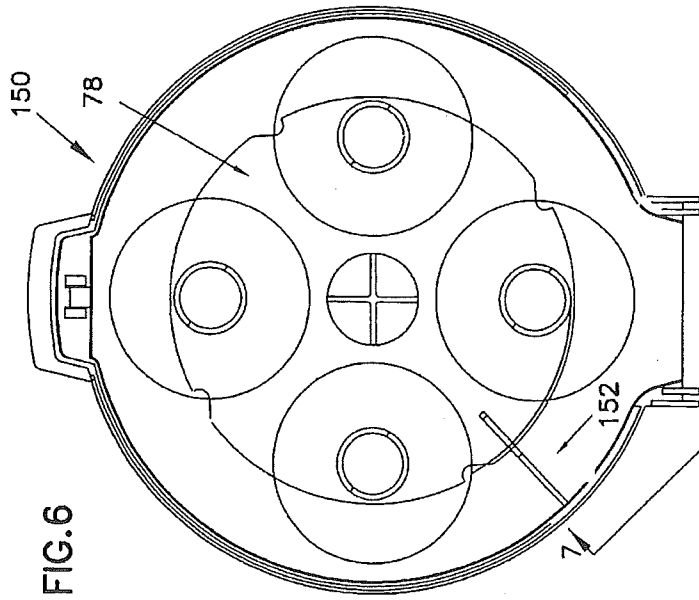
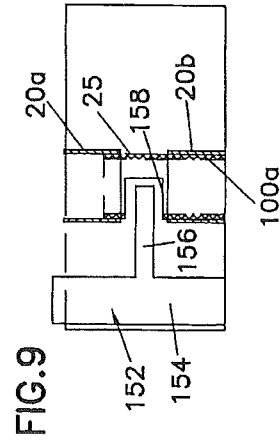
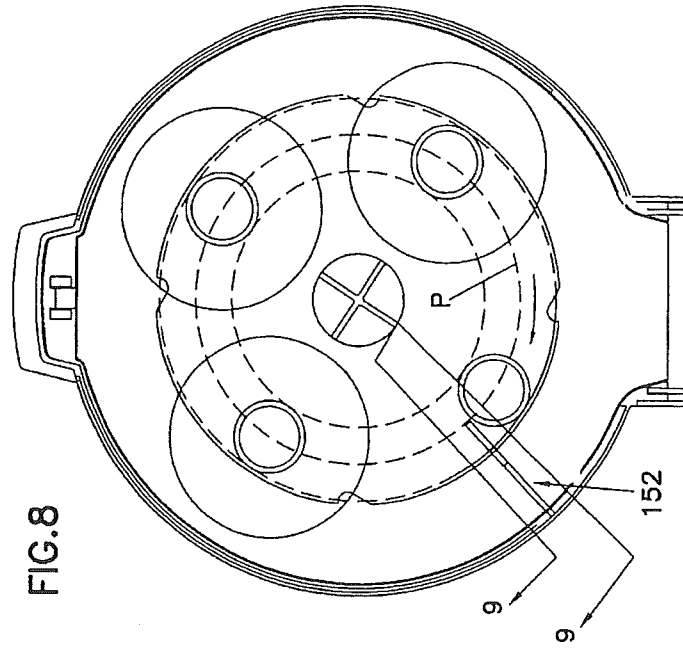


U.S. Patent

Dec. 10, 2002

Sheet 3 of 5

US 6,491,251 B1



U.S. Patent

Dec. 10, 2002

Sheet 5 of 5

US 6,491,251 B1

FIG. 12

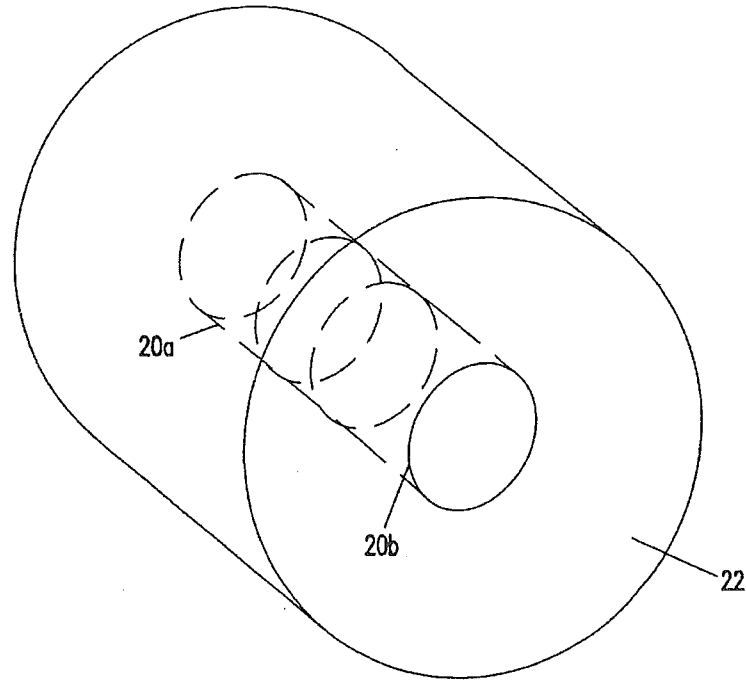
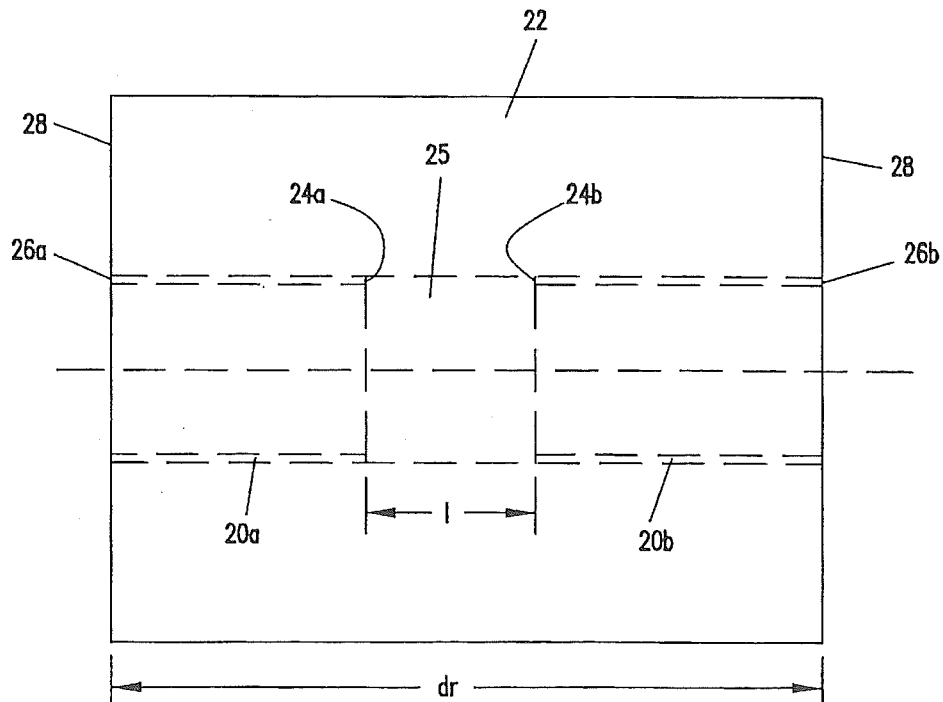


FIG. 11



US 6,491,251 B1

1

DOUBLE CORE TISSUE ROLL, DISPENSER AND METHOD

FIELD

This invention relates to the dispensing of web material such as toilet tissue, paper towels and the like, from rolls of web material contained within a dispenser. This invention further relates to improved rolls that contain web material for use with a dispenser, and to methods of forming such rolls. The inventive concepts will be described hereinafter primarily in relation to toilet tissue dispensers and toilet tissue rolls. It is to be realized that the inventive concepts described herein have applications to other types of web materials in addition to toilet tissue, including, but not limited to, paper towels.

BACKGROUND

There has been continuing effort over the years to provide toilet tissue dispensers that store multiple rolls of toilet tissue and sequentially dispense the rolls. One of the advantages provided by these types of dispensers is that a reserve roll (or rolls) is available as a replacement for the roll that is currently in use.

To avoid tissue waste, it is important that the roll currently in use be depleted to its fullest extent before allowing the user to access a replacement roll. Devices that attempt to achieve such a result using a variety of methods are known in the prior art, as exemplified in U.S. Pat. Nos. 3,294,329; 3,381,909; 3,387,902; 4,108,513; 4,522,346; 4,577,426; 5,310,129; 5,636,812; and 5,749,538.

There is, however, a continuing need for improved toilet tissue dispensers that inhibit access to a replacement roll until the roll currently in use is depleted.

SUMMARY

The invention provides an improved web material dispenser that is designed to dispense web material, such as toilet tissue or the like. The web material dispenser comprises a housing, with a spider rotatably mounted within the housing for rotation about an axis extending through a center of the spider. A plurality of spools are connected to the spider and project therefrom in a direction parallel to the rotation of the spider axis. The spools are rotatable with the spider along a rotational path spaced from the axis. A core stop is fixed to the housing, with the core stop crossing the rotational path of the spools to prevent rotation of the spider until the tissue has been substantially depleted or exhausted from the roll.

In addition to the web material dispenser, the invention provides an improved web material roll for use in the inventive web material dispenser described herein or in other web material dispensers, as well as a method of making the roll.

In one version as claimed, a web material roll includes first and second core sections, with the core sections being spaced apart from each other to define a gap therebetween. In addition, a web material is wound onto the core sections.

A method of forming a core for this type of web material roll comprises providing an elongate, generally cylindrical tube having a longitudinal axis; cutting the tube into a plurality of generally cylindrical sections, with each of the sections having a length approximately equal to a width of web material to be wound onto the roll; and removing a predetermined length from proximate the center of at least

2

one of the sections to form first and second core sections, whereby the combined length of the first and second core sections is less than the width of the web material to be wound thereon.

These and various other advantages and features of novelty which characterize the invention are pointed out with particularity in the claims annexed hereto and forming a part hereof. However, for a better understanding of the invention, its advantages and objects obtained by its use, reference should be made to the drawings which form a further part hereof, and to the accompanying description, in which there is described a preferred embodiment of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a front view of the web material dispenser, with the front housing portion open relative to the rear housing portion to show the interiors thereof and with the spider and core stop removed from the rear housing portion.

FIG. 2 is a front view of the rear housing portion showing the spider and core stop.

FIG. 3 is a side view of the core stop and the roll at the dispensing position, viewed generally in the direction 3—3 in FIG. 2.

FIG. 4 is a view similar to FIG. 2 showing rotation of the spider upon depletion of the web material from the roll at the dispensing position.

FIG. 5 is a cross-sectional view of the core stop and core taken along line 5—5 in FIG. 4.

FIG. 6 illustrates a dispenser using a second embodiment of a core stop.

FIG. 7 is a side view of the core stop and the roll at the dispensing position, viewed generally in the direction 7—7 in FIG. 6.

FIG. 8 is a view similar to FIG. 6 showing rotation of the spider upon depletion of the web material from the roll at the dispensing position.

FIG. 9 is a cross-sectional view of the core stop and core taken along line 9—9 in FIG. 8.

FIG. 10 illustrates a tube that is used to form the core of the web material roll.

FIGS. 11 and 12 are a side view and a perspective view, respectively, of the web material roll utilizing a core that is formed from the tube in FIG. 10.

DETAILED DESCRIPTION

The web material rolls and the methods of making the rolls will first be described by referring to FIGS. 10–12. The web material roll and related method described herein are specifically directed to rolls of toilet tissue. However, it is to be realized that the inventive concepts could be used in relation to other types of web material rolls that have a core and a web material wound onto the core, such as paper towel rolls. In addition, the inventive web material rolls are described as being used on the inventive web material dispensers described herein. It is to be realized that the web material rolls could be used with other types of web material dispensers in addition to the dispensers described herein.

FIGS. 10–12 illustrate the toilet tissue roll and method of forming the core thereof. This roll uses what can be referred to as a “double core”. Initially, as illustrated in FIG. 10, an elongate, generally cylindrical tube 12 having a longitudinal axis A—A is provided. The tube 12 is then cut at points 14a, 14b, . . . 14n to form a plurality of equal length sections 16a, 16b, . . . 16n having a width approximately equal to the

US 6,491,251 B1

3

width of toilet tissue. A portion 18 (shown in hatched lines) proximate the center of each section 16a-n is then removed by cutting to form core two core sections 20a, 20b. The combined length of the core sections 20a, 20b is thus less than the width of the toilet tissue to be wound onto the core sections 20a, 20b. In one implementation, the portion 18 that is removed from each section 16a-n preferably has a length of approximately 2.0 inches, so that the combined length of the core sections 20a, 20b is approximately 2.0 inches shorter in length than the tissue to be wound thereon. The tube 12 can have any convenient length from which a plurality of core sections can be formed, such as a length of approximately 115.0 inches.

Once the core sections 20a, 20b are formed, toilet tissue 22 is wound onto the core sections 20a, 20b with the core sections 20a, 20b being spaced apart from each other, as is evident from FIGS. 11 and 12 which illustrate a subsequently formed toilet tissue roll. As is further evident from FIGS. 11 and 12, the core sections 20a, 20b include ends 24a, 24b that face each other and which are spaced apart by approximately the distance I thereby forming a gap 25. The core sections 20a, 20b further include ends 26a, 26b that are even with the opposite side surfaces 28 of the tissue 22. Thus, there is a portion of the tissue 22 approximately midway between the side surfaces 28 that is not core supported due to the gap 25 between the ends 24a, 24b of the core sections 20a, 20b. The gap 25 between the core sections 20a, 20b remains until such time as the tissue 22 is substantially depleted from the roll.

As will be described below, the gap 25 between the core sections 20a, 20b facilitates sensing that the tissue is substantially depleted or exhausted from the roll. It is to be realized that the core sections 20a, 20b could be formed using methods other than that described above. For instance, instead of removing a single portion at the center of each section, portions could be removed from each end of a section and the section then cut in half to thereby form the core sections.

One implementation of a web material dispenser 50 is illustrated in FIGS. 1-5. With reference to FIG. 1, the dispenser 50 includes a rear housing portion 52 and a front housing portion 54 pivotally connected to the rear housing portion 52 at the bottom ends thereof via pivots 56. The housing portions 52, 54 include cooperating locking structures 58a, 58b at the top ends thereof, by which the housing portions 52, 54 can be locked together to form an enclosure for a plurality of rolls of toilet tissue.

The housing portions 52, 54 are generally circular in shape, with each including a generally circular end wall 60, 62 and a generally circular sidewall 64, 66. The end walls 60, 62 and sidewalls 64, 66 combine to form an interior space when the housing portion 54 is pivoted upward from the position shown in FIG. 1 and connected to rear housing portion 52, via the locking structures 58a, 58b. When the housing portions 52, 54 are locked together, the end walls 60, 62 face each other and the sidewalls 64, 66 fit together to form an enclosure. A dispensing opening 70 is formed by the sidewalls 64, 66 at the bottoms thereof through which tissue from one of the tissue rolls is dispensed.

The end wall 60 of the housing portion 52 is further provided with a plurality of slots 72 by which the housing portion 52 can be mounted to a wall or other fixed structure using bolts, screws or other suitable fasteners.

With reference to FIGS. 2 and 4, a spider 78 is rotatably mounted on the rear housing portion 52 for rotation about a central axis B in a clockwise direction as shown by the

4

arrows in FIGS. 2 and 4. The spider 78 is generally circular in shape and includes a central boss 80 projecting from the center thereof parallel to the rotation axis B and toward the front housing portion 54. The boss 80 is sized to rotatably fit over a cylindrical hub 82 (best seen in FIG. 1) that projects from the end wall 60 of the rear housing portion 52 in the direction of the axis B. The boss 80 and hub 82 are preferably secured together via a snap fit connection that detachably connects the boss 80 and hub 82 together while permitting rotation of the boss 80, and thus the spider 78, on the hub 82.

In addition, an x-shaped formation 90, visible in FIGS. 1, 2 and 4, projects from the top end of the boss 80. Further, an actuation disk 92, shown in dashed lines in FIG. 1, is rotatably mounted on the front housing portion 54. The disk 92 is disposed on the exterior side of the end wall 62 whereby the disk is accessible from outside the housing 52, 54 by a user in order to rotate the spider 78. A plurality of circumferentially spaced fingers 94 project rearwardly from the disk 92 toward the rear housing portion 52, with a gap between each adjacent finger 94. The x-shaped formation 90 and the fingers 94 are sized such that they engage when the front housing portion 54 is pivoted to the closed position relative to the rear housing portion 52, with x-shaped formation 90 disposed within the gaps between the fingers 94. With this construction, rotation of the disk 92 causes rotation of the spider 78. A pair of diametrically opposite fingers 94 each include a shoulder 96 formed thereon which fit over a boss 98 projecting from the interior surface of the end wall 62 so as to rotatably secure the disk 92 to the end wall 62.

Returning to FIGS. 2 and 4, the spider 78 is shown to include a plurality of spools 100a-d, in this instance four spools, projecting from the spider 78 parallel to the axis B, with the spools disposed adjacent to the circumference of the spider 78. The spools 100a-d are spaced at 90 degree intervals around the spider 78. However, it would be possible to use a larger or lesser number of spools, depending upon the size of the tissue rolls and the needs of the consumer, in which case the spools would be spaced at intervals of 360 degrees divided by the number of spools. Each spool 100a-d is sized to receive thereon a tissue roll 102.

As shown in FIGS. 2 and 4, the circumference of the spider 78 is provided with a plurality of detents 104. Preferably, there is one detent 104 for each spool 100a-d disposed on the spider 78. A resilient indexing finger 106 is fixed at a first end thereof to the rear housing portion 52 and the second end thereof extends toward the spider for engagement within one of the detents 104. When the end of the finger 106 engages in a detent 104, rotation of the spider 78 in a counterclockwise direction is prevented, and one roll 102 is held at a dispensing position while a second roll 102 is at a reserve position (see FIG. 2). However, rotation of the spider 78 in a clockwise direction is selectively permitted, as described below.

A core stop 110 is further fixed to the rear housing portion 52 and extends along a radial axis toward the boss 80 of the spider 78 and into the rotation path of the spools 100a-d and rolls 102. The rotation path of the spools 100a-d is shown in dashed lines in FIG. 4, and includes an outer rotation path P_o defined by the radially outermost point of the spools 100a-d as the spider rotates, an inner rotation path P_i defined by the radially innermost point of the spools, and a central rotation path P_c defined by the central point of the spools. As used herein, rotation path is meant to include at least one of the paths P_o , P_c , and P_i .

US 6,491,251 B1

5

The core stop 110, as best seen in FIG. 5, includes a first portion 112 extending parallel to the spools 100a-d and a second portion 114 that extends perpendicular to the spools. The second portion 114 extends toward and crosses the outer, central and inner rotation paths of the spools 100a-d and includes a bottom edge 116 that is spaced a distance d above the spider 78. Further, as illustrated in FIG. 3, the second portion 114 includes a front surface 118 that is sloped toward the bottom edge 116 in the direction of rotation of the spider 78.

With reference to FIGS. 2-5, a "double core" type of roll, such as the roll described in FIGS. 11 and 12, is loaded onto each spool 100a-d. The rolls 102 are shown as being mounted onto the spools 100a-d such that the core sections 20a are above the core sections 20b. However, the rolls 102 could be mounted such that the core sections 20b are positioned above the core sections 20a.

As shown in FIG. 3, the distance d, between the side surfaces 28 of the tissue 22 is greater than the distance d between the bottom edge 116 of the second portion 114 of the core stop 110 and the spider 78. Thus, the tissue 22 will contact the second portion 114 of the core stop 110, if a user tries to rotate the spider 78, and thereby prevent clockwise rotation of the spider 78. The tissue 22 will retain the core sections 20a, 20b in their spaced apart condition until such time as the tissue 22 has been substantially depleted or exhausted from the roll, and rotation of the spider 78 will be prevented. It is important to realize that the distance d is greater than the length of the spools 100a-d, as evident from FIG. 5, such that, during rotation of the spider 78, the spools can travel under the bottom edge 116 of the core stop 110.

However, referring to FIGS. 4 and 5, once the tissue 22 has been substantially depleted or exhausted, if a user rotates the spider 78 in a clockwise direction, the angled front surface 118 will cause the core section 20a to be forced downward toward the core section 20b. Thus, as evident from FIG. 5, the core sections 20a, 20b and the spool 100a can travel under the bottom edge 116 to permit the spider 78 to be rotated so as to bring the next reserve tissue roll into the dispensing position.

Thus, the core stop 110 acts as a means for sensing that the tissue has been exhausted from the roll currently at the dispensing position. Once the tissue has been exhausted, the spider can be manually rotated in the clockwise direction to bring the reserve roll to the dispensing position. Since the reserve roll has tissue thereon, the tissue contacts the core stop 110 and prevents further rotation of the spider until the reserve roll is itself exhausted of tissue.

FIGS. 6-9 illustrate another embodiment of a dispenser 150. The dispenser 150 is similar to the dispenser 50 of FIGS. 1-5, except that the dispenser 150 uses a different core stop 152. The core stop 152 in FIGS. 6-9 is configured to function with the gap 25 between the core sections 20a, 20b in order to sense the depletion of tissue from the roll.

With reference to FIG. 9, it is seen that the core stop 152 includes a vertical portion 154 extending parallel to the spools. A finger 156 projects from the vertical portion 154 approximately midway along the length thereof, and extends along a radial axis toward the boss 80 of the spider 78. In this embodiment, the distal end of the finger 156 preferably extends at least past the outer rotation path P_o defined by the radially outermost point of the spools 100a-d, but no further than the central rotation path P_c. Preferably, the end of the finger is located adjacent the central rotation path, although the end could be located between the outer and central paths as well. Each spool 100a-d is formed with a cut-out 158

6

that, when a roll 102 is mounted on each spool, is positioned adjacent the gap 25. The cut-out 158 is defined over approximately one-half of the circumference of each spool.

The core stop 152 functions as follows. When tissue 22 in the roll 102, the tissue 22 will contact the finger 156 and rotation of the spider 78 is prevented. The spider will be prevented from rotating as long as tissue remains on the roll. However, once the tissue 22 has been substantially depleted or exhausted, the cut-out 158 will be uncovered, and the finger 156 can then pass through the cut-out 158 in the spool 100a to permit rotation of the spider to bring the next reserve roll to the dispensing position. Thus, in this embodiment, the core sections 20a, 20b remain generally spaced apart.

It is contemplated that rotation of the spider 78 could be caused by a user when a small amount of tissue remains on the roll, in which case sufficient force would need to be applied to overcome the force of the tissue that remains covering the gap 25 and the cut-out 158. Under most circumstances, the force required to produce such a rotation would be sufficiently large so as to deter rotation until the tissue has been substantially depleted or exhausted.

It is to be realized that the dispensers 50, 150 described herein could be utilized with tissue rolls other than those described herein and still be in accordance with the principles of the invention. Furthermore, the tissue rolls described herein could be utilized on dispensers other than those described herein and still be in accordance with the principles of the invention.

The above specification, examples and data provide a complete description of the manufacture and use of the composition of the invention. Since many embodiments of the invention can be made without departing from the spirit and scope of the invention, the invention resides in the claims hereinafter appended.

We claim:

1. A method of forming a core for a web material roll, comprising:

providing an elongate, generally cylindrical tube having a longitudinal axis;

cutting the tube into a plurality of generally cylindrical sections, each of said sections having a length approximately equal to a width of web material to be wound onto the roll; and

removing a predetermined length from proximate the center of at least one of said sections to form first and second core sections, whereby the combined length of the first and second core sections is less than the width of the web material to be wound thereon.

2. A web material dispenser, comprising:

a housing;

a spider rotatably mounted within the housing, said spider rotatable about an axis extending through a center of the spider;

a plurality of spools connected to said spider and projecting therefrom in a direction parallel to said axis, said spools being rotatable with said spider along a rotation path spaced from said axis; and

a stop fixed to said housing, said stop configured to cross the rotation path of said spools to engage web material on a web material roll disposed on one of said spools to sense depletion of the web material and permit rotation of said spider when the web material becomes depleted.

3. The web material dispenser according to claim 2, wherein said stop includes a first portion extending parallel

US 6,491,251 B1

7

to said spools and a second portion extending perpendicular to said first portion and to said spools, said second portion extending toward and crossing a central rotation path of said spools.

4. The web material dispenser according to claim 3, wherein said spools each include a distal end spaced from said spider, and said second portion is spaced from the distal ends of said spools whereby said spools are able to rotate under said second portion.

5. The web material dispenser according to claim 4, wherein each said spool is configured to receive a web material roll thereon, at least one of said web material rolls including first and second core sections, said core sections being spaced apart from each other defining a gap therebetween, and further including a web material wound onto said core sections; wherein the web material wound onto the core sections has side surfaces defining a first distance therebetween, and wherein said first and second core sections have a combined length that is less than said first distance.

6. The web material dispenser according to claim 5, wherein said second portion has a bottom edge that is positioned above the spider a second distance, said second distance being greater than the combined length of said first and second core sections and said second distance being less than said first distance.

7. The web material dispenser according to claim 2, wherein said includes a first portion extending parallel to said spools and a second portion extending perpendicular to said first portion and to said spools, said second portion extending toward and crossing an outer rotation path of said spools.

8. The web material dispenser according to claim 7, wherein said second portion does not cross a central rotation path of said spools.

9. The web material dispenser according to claim 7, wherein said second portion includes an end that is located adjacent to a central rotation path of said spools.

10. The web material dispenser according to claim 7, wherein at least one of said spools includes a cut-out that is positioned to permit passage of said second portion there-through.

11. The web material dispenser according to claim 10, wherein each said spool is configured to receive a web material roll thereon, and wherein at least one of said web material rolls includes first and second core sections, said core sections being spaced apart from each other defining a gap therebetween, and further including a web material wound onto said core sections; and wherein said cut-out is positioned within said gap when the at least one web material roll is positioned on the spool.

12. A web material dispenser, comprising:

a housing;

a spider rotatably mounted within the housing, said spider rotatable about an axis extending through a center of the spider;

a plurality of spools connected to said spider and projecting therefrom in a direction parallel to said axis, said spools being rotatable with said spider along a rotation path spaced from said axis; and

a stop fixed to said housing, said stop including a first portion extending parallel to said spools and a second portion extending perpendicular to said first portion and to said spools, said second portion extending toward and crossing a central rotation path of said spools.

13. A web material dispenser, comprising:

a housing;

8

a spider rotatably mounted within the housing, said spider rotatable about an axis extending through a center of the spider;

a plurality of spools connected to said spider and projecting therefrom in a direction parallel to said axis, said spools being rotatable with said spider along a rotation path spaced from said axis; and

a stop fixed to said housing, said stop including a first portion extending parallel to said spools and a second portion extending perpendicular to said first portion and to said spools, said second portion extending toward and crossing an outer rotation path of said spools.

14. A method of forming a roll of toilet tissue, comprising: providing an elongate, generally cylindrical tube having a longitudinal axis;

forming a plurality of generally cylindrical core sections from said tube, at least two of said core sections having a combined length that is less than the width of toilet tissue to be wound onto the two core sections;

aligning and separating said two core sections such that longitudinal axes of said core sections are colinear and there is a gap between said two core sections; and

winding toilet tissue onto said two core sections.

15. The method of claim 14, wherein said two core sections are separated such that the combined length of said two core sections and said gap is equal to the width of said toilet tissue.

16. The method of claim 14, wherein said two core sections each have the same length.

17. A roll of toilet tissue produced according to the method of claim 14.

18. A method of using a toilet tissue roll having first and second colinear core sections spaced apart from each other defining a gap therebetween, and toilet tissue wound onto said core sections and simultaneously contacting each said core section, the method comprising:

mounting the roll in a dispenser to dispense the toilet tissue, said dispenser including a sensing mechanism that senses the toilet tissue; and

maintaining a substantially colinear relationship of the first and second core sections within the dispenser when the sensing mechanism senses substantial depletion of the toilet tissue.

19. A combination comprising:

a web material roll comprising first and second core sections, said core sections being spaced apart from each other defining a gap therebetween, and a web material wound onto said core sections and simultaneously contacting each said core section; and

a web material dispenser that dispenses said web material from said roll, said dispenser including a housing, a spool mounted within said housing and rotatable relative to said housing along a rotation path and that receives said roll thereon, a sensing mechanism that engages said web material on said roll to prevent rotation of said spool along said rotation path;

and wherein said gap permits rotation of said spool along said rotation path when said sensing mechanism senses a sufficient depletion of said web material from said roll.

20. The combination of claim 19, wherein said sensing mechanism comprises a stop that includes a first portion extending parallel to said spool and a second portion extending perpendicularly to said first portion, said second portion is positioned to engage said web material, and said second

US 6,491,251 B1

9

portion is design to force one said core section toward the other said core section when said web material has been sufficiently depleted.

21. The combination of claim 19, wherein said sensing mechanism comprises a stop that includes a first portion 5 extending parallel to said spool and a second portion extend-

10

ing perpendicularly to said first portion, said second portion is positioned to engage said web material, and said second portion extends into said gap when said web material has been sufficiently depleted.

* * * * *

Exhibit B



US006648267B2

(12) **United States Patent**
Stanland et al.

(10) Patent No.: **US 6,648,267 B2**
(45) Date of Patent: ***Nov. 18, 2003**

(54) **DOUBLE CORE TISSUE ROLL, DISPENSER AND METHOD**

(75) Inventors: Mark Harrison Stanland, Lexington, KY (US); Steven M. Slye, Harrodsburg, KY (US); Douglas E. Bagan, Harrodsburg, KY (US); Alain P. Cotnoir, Danville, KY (US); Randy A. Baughman, Harrodsburg, KY (US); Adam T. Elliott, Lexington, KY (US)

(73) Assignee: **Bay West Paper Corporation**, Harrodsburg, KY (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **10/015,051**

(22) Filed: **Dec. 11, 2001**

(65) **Prior Publication Data**

US 2002/0050544 A1 May 2, 2002

Related U.S. Application Data

(63) Continuation of application No. 09/521,834, filed on Mar. 9, 2000.

(51) Int. Cl.⁷ **B65H 19/00**

(52) U.S. Cl. **242/559.2; 242/613**

(58) Field of Search **242/559.2, 600, 242/613, 160.4, 160.1, 599, 596.7**

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,108,855 A	8/1914	Simons
1,716,812 A	6/1929	Ball
2,299,626 A	10/1942	Hunt
2,703,681 A	3/1955	Jacobs
2,726,823 A	12/1955	Jespersen
2,905,405 A	9/1959	Burton et al.
3,084,006 A	4/1963	Roemer

3,085,762 A	4/1963	Subklew
3,126,234 A	3/1964	Badlas et al.
3,211,504 A	10/1965	Bump
3,214,014 A	10/1965	Perrin
3,294,329 A	12/1966	Tucker et al.
3,381,909 A	5/1968	Tucker et al.
3,387,902 A	6/1968	Perrin et al.
3,433,355 A	3/1969	Smith
3,437,388 A	* 4/1969	Jespersen 242/560.3
3,438,589 A	* 4/1969	Jespersen 206/408
3,650,487 A	3/1972	Bahnsen
4,108,513 A	8/1978	Lander
4,108,547 A	8/1978	Stemmle
4,522,346 A	6/1985	Jespersen
4,557,426 A	12/1985	Siciliano
4,903,909 A	2/1990	Suzuki
5,236,141 A	8/1993	Kewin
5,310,129 A	5/1994	Whittington et al.
5,356,086 A	* 10/1994	Takagi 242/596.7
5,605,001 A	2/1997	Derk
5,636,812 A	6/1997	Conner et al.
5,749,538 A	5/1998	Brown et al.
5,829,713 A	11/1998	Kewin
5,833,169 A	11/1998	Morand
6,302,352 B1	* 10/2001	Applegate 242/129.53
6,386,479 B1	* 5/2002	Lewis et al. 242/594.4
6,491,251 B1	* 12/2002	Stanland et al. 242/559.2

FOREIGN PATENT DOCUMENTS

GB	2245882	1/1992
NL	8602194	3/1988

* cited by examiner

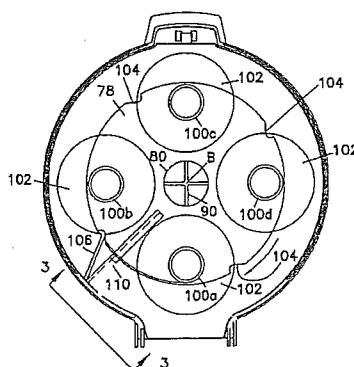
Primary Examiner—Emmanuel Marcelo

(74) Attorney, Agent, or Firm—Merchant & Gould P.C.

(57) **ABSTRACT**

An improved web material dispenser that is designed to dispense web material, such as toilet tissue or the like. The dispenser is able to retain a roll containing tissue at a dispensing position until the tissue has been exhausted from the roll. The dispenser senses that the tissue is exhausted from the roll, and only then permits a reserve roll to be rotated into a dispensing position. Thus, the dispenser ensures that the tissue from each roll is used up before permitting access to a reserve roll. The invention also provides a new web material roll that utilizes a "double core", as well as a method of making the "double core".

11 Claims, 5 Drawing Sheets

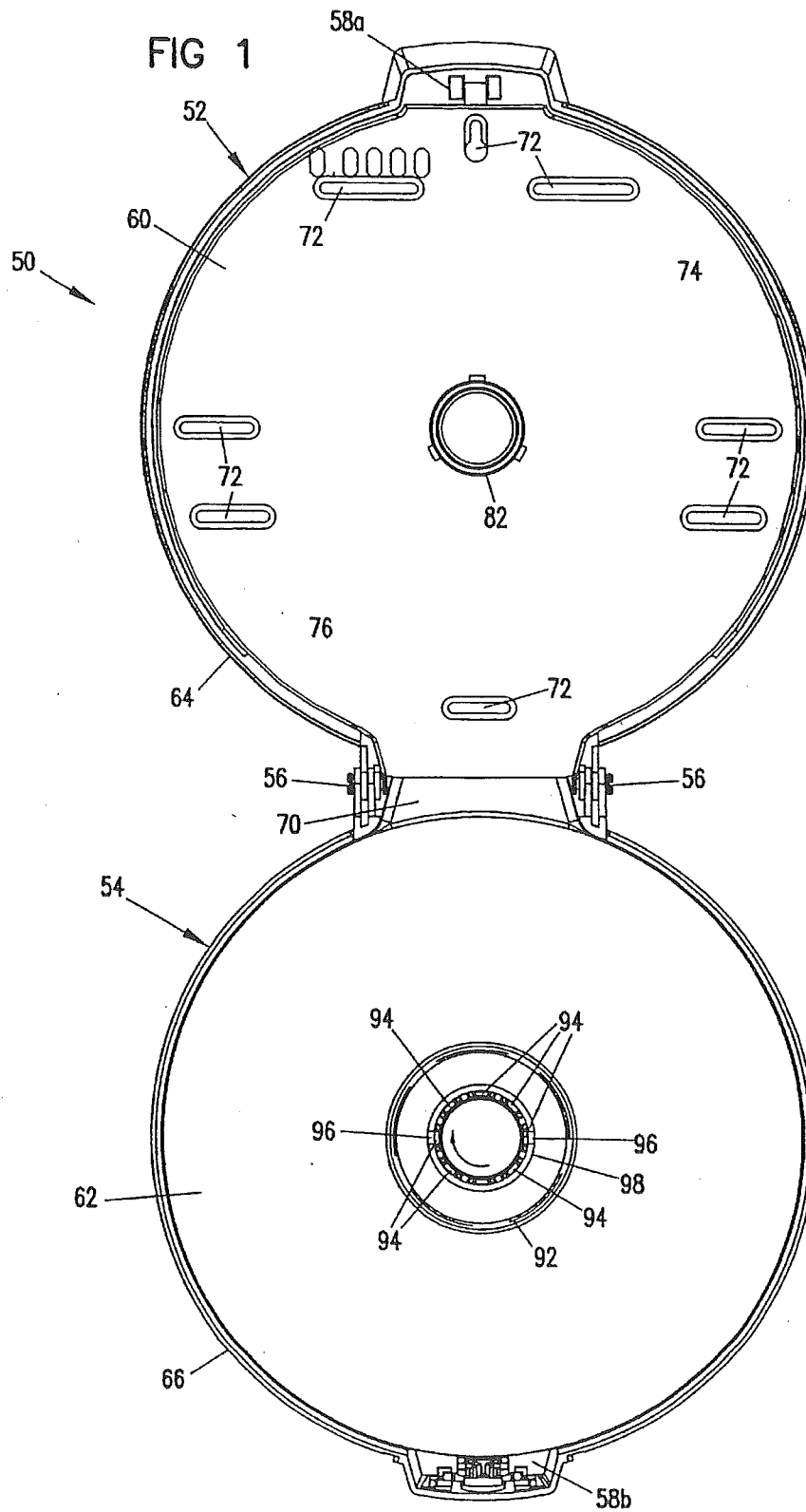


U.S. Patent

Nov. 18, 2003

Sheet 1 of 5

US 6,648,267 B2

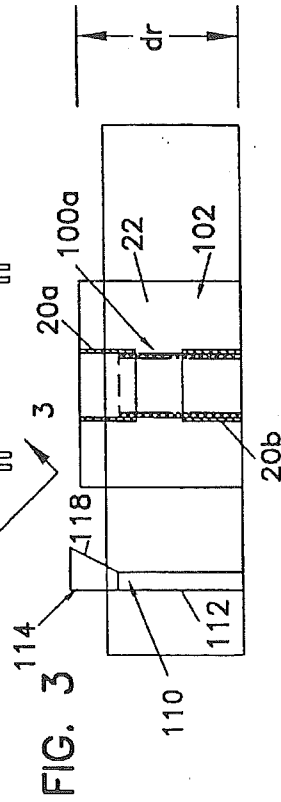
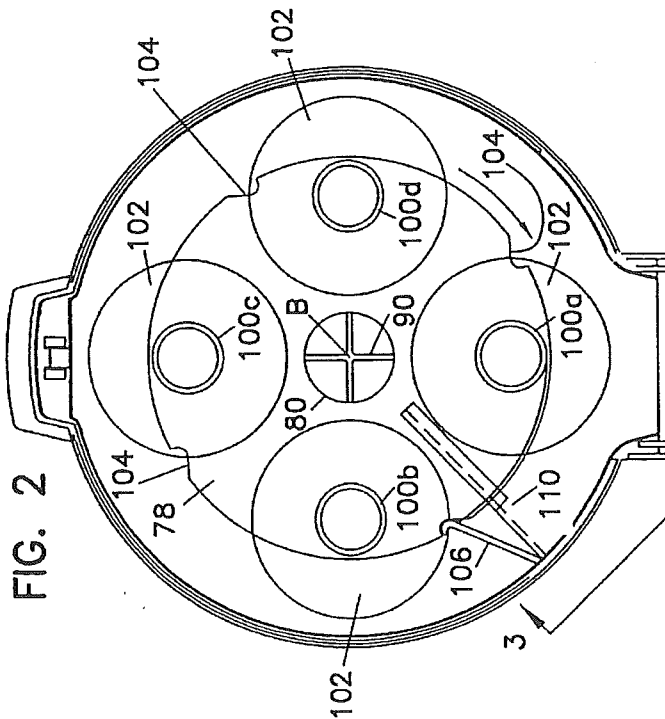
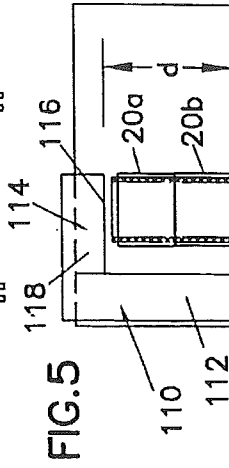
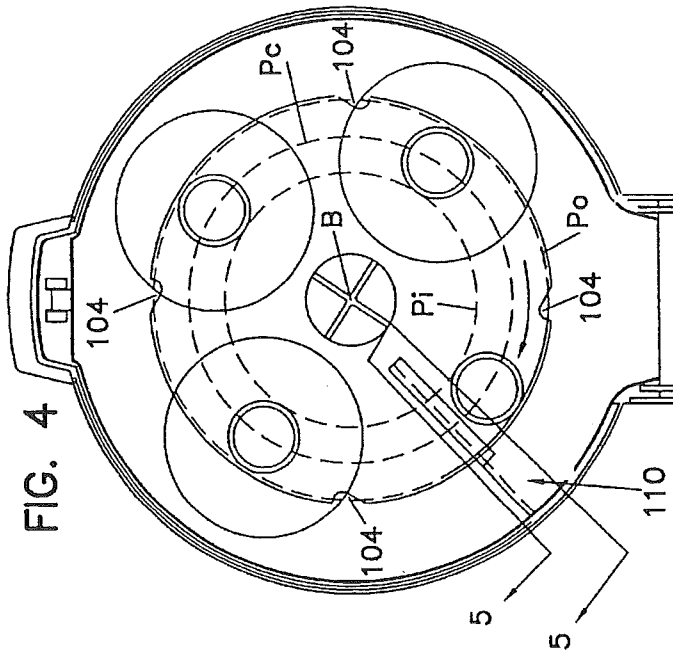


U.S. Patent

Nov. 18, 2003

Sheet 2 of 5

US 6,648,267 B2

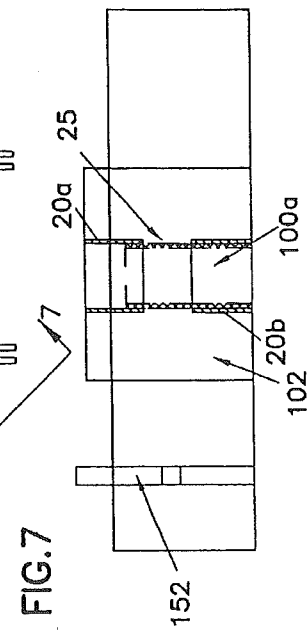
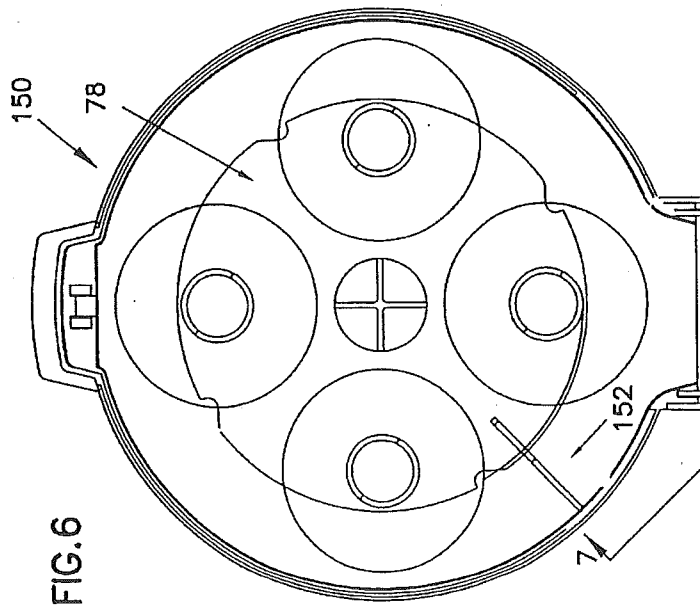
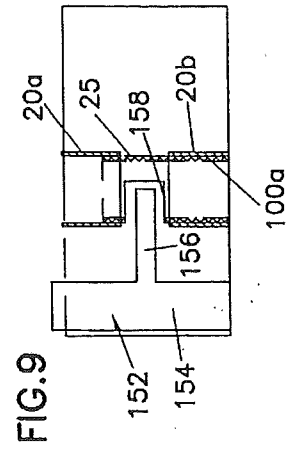
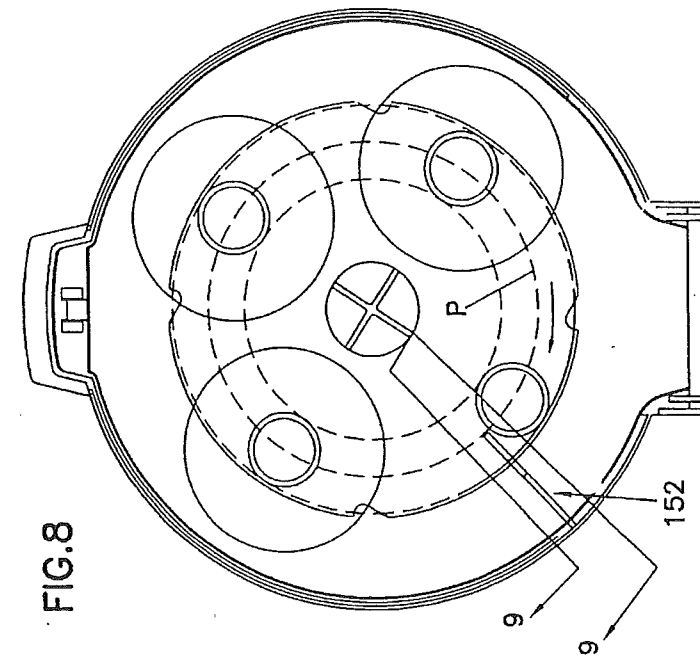


U.S. Patent

Nov. 18, 2003

Sheet 3 of 5

US 6,648,267 B2

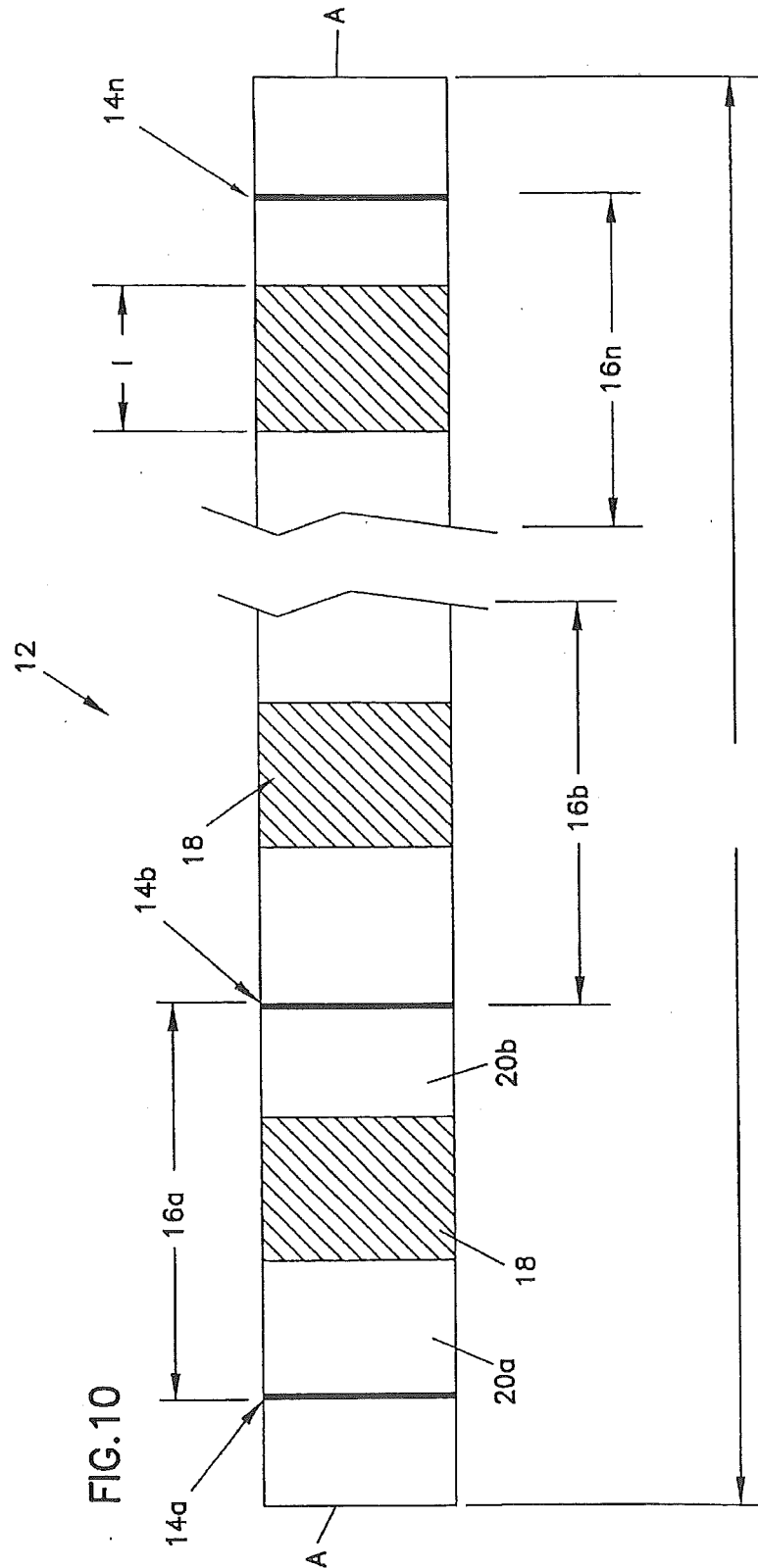


U.S. Patent

Nov. 18, 2003

Sheet 4 of 5

US 6,648,267 B2



U.S. Patent

Nov. 18, 2003

Sheet 5 of 5

US 6,648,267 B2

FIG. 12

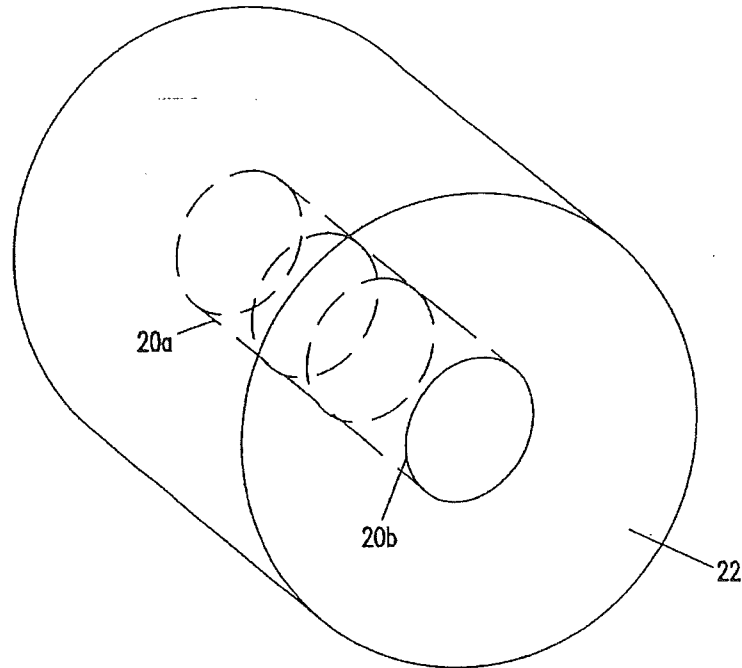
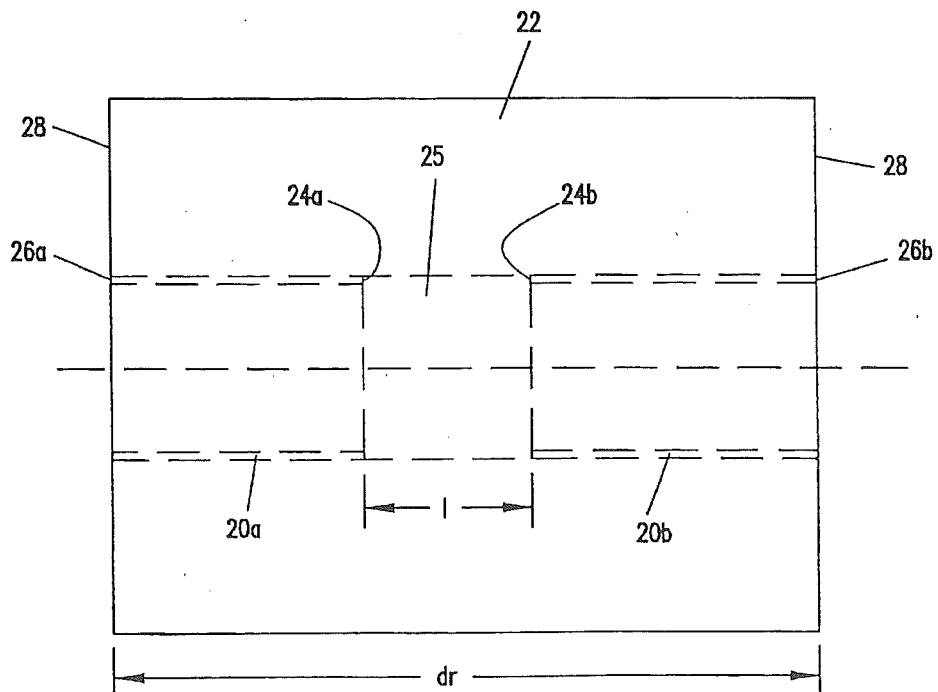


FIG. 11



US 6,648,267 B2

1

**DOUBLE CORE TISSUE ROLL, DISPENSER
AND METHOD**

This application is a continuation of application Ser. No. 09/521,834, filed on Mar. 9, 2000, now U.S. Pat. No. 6,491,251 B1, issued on Dec. 10, 2002, which application is incorporated herein by reference.

FIELD

This invention relates to the dispensing of web material such as toilet tissue, paper towels and the like, from rolls of web material contained within a dispenser. This invention further relates to improved rolls that contain web material for use with a dispenser, and to methods of forming such rolls. The inventive concepts will be described hereinafter primarily in relation to toilet tissue dispensers and toilet tissue rolls. It is to be realized that the inventive concepts described herein have applications to other types of web materials in addition to toilet tissue, including, but not limited to, paper towels.

BACKGROUND

There has been continuing effort over the years to provide toilet tissue dispensers that store multiple rolls of toilet tissue and sequentially dispense the rolls. One of the advantages provided by these types of dispensers is that a reserve roll (or rolls) is available as a replacement for the roll that is currently in use.

To avoid tissue waste, it is important that the roll currently in use be depleted to its fullest extent before allowing the user to access a replacement roll. Devices that attempt to achieve such a result using a variety of methods are known in the prior art, as exemplified in U.S. Pat. Nos. 3,294,329; 3,381,909; 3,387,902; 4,108,513; 4,522,346; 4,577,426; 5,310,129; 5,636,812; and 5,749,538.

There is, however, a continuing need for improved toilet tissue dispensers that inhibit access to a replacement roll until the roll currently in use is depleted.

SUMMARY

The invention provides an improved web material dispenser that is designed to dispense web material, such as toilet tissue or the like. The web material dispenser comprises a housing, with a spider rotatably mounted within the housing for rotation about an axis extending through a center of the spider. A plurality of spools are connected to the spider and project therefrom in a direction parallel to the rotation of the spider axis. The spools are rotatable with the spider along a rotational path spaced from the axis. A core stop is fixed to the housing, with the core stop crossing the rotational path of the spools to prevent rotation of the spider until the tissue has been substantially depleted or exhausted from the roll.

In addition to the web material dispenser, the invention provides an improved web material roll for use in the inventive web material dispenser described herein or in other web material dispensers, as well as a method of making the roll.

In one version as claimed, a web material roll includes first and second core sections, with the core sections being spaced apart from each other to define a gap therebetween. In addition, a web material is wound onto the core sections.

A method of forming a core for this type of web material roll comprises providing an elongate, generally cylindrical tube having a longitudinal axis; cutting the tube into a

2

plurality of generally cylindrical sections, with each of the sections having a length approximately equal to a width of web material to be wound onto the roll; and removing a predetermined length from proximate the center of at least one of the sections to form first and second core sections, whereby the combined length of the first and second core sections is less than the width of the web material to be wound thereon.

These and various other advantages and features of novelty which characterize the invention are pointed out with particularity in the claims annexed hereto and forming a part hereof. However, for a better understanding of the invention, its advantages and objects obtained by its use, reference should be made to the drawings which form a further part hereof, and to the accompanying description, in which there is described a preferred embodiment of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a front view of the web material dispenser, with the front housing portion open relative to the rear housing portion to show the interiors thereof and with the spider and core stop removed from the rear housing portion.

FIG. 2 is a front view of the rear housing portion showing the spider and core stop.

FIG. 3 is a side view of the core stop and the roll at the dispensing position, viewed generally in the direction 3—3 in FIG. 2.

FIG. 4 is a view similar to FIG. 2 showing rotation of the spider upon depletion of the web material from the roll at the dispensing position.

FIG. 5 is a cross-sectional view of the core stop and core taken along line 5—5 in FIG. 4.

FIG. 6 illustrates a dispenser using a second embodiment of a core stop.

FIG. 7 is a side view of the core stop and the roll at the dispensing position, viewed generally in the direction 7—7 in FIG. 6.

FIG. 8 is a view similar to FIG. 6 showing rotation of the spider upon depletion of the web material from the roll at the dispensing position.

FIG. 9 is a cross-sectional view of the core stop and core taken along line 9—9 in FIG. 8.

FIG. 10 illustrates a tube that is used to form the core of the web material roll.

FIGS. 11 and 12 are a side view and a perspective view, respectively, of the web material roll utilizing a core that is formed from the tube in FIG. 10.

DETAILED DESCRIPTION

The web material rolls and the methods of making the rolls will first be described by referring to FIGS. 10–12. The web material roll and related method described herein are specifically directed to rolls of toilet tissue. However, it is to be realized that the inventive concepts could be used in relation to other types of web material rolls that have a core and a web material wound onto the core, such as paper towel rolls. In addition, the inventive web material rolls are described as being used on the inventive web material dispensers described herein. It is to be realized that the web material rolls could be used with other types of web material dispensers in addition to the dispensers described herein.

FIGS. 10–12 illustrate the toilet tissue roll and method of forming the core thereof. This roll uses what can be referred to as a “double core”. Initially, as illustrated in FIG. 10, an

US 6,648,267 B2

3

elongate, generally cylindrical tube 12 having a longitudinal axis A—A is provided. The tube 12 is then cut at points 14a, 14b, . . . 14n to form a plurality of equal length sections 16a, 16b, . . . 16n having a width approximately equal to the width of toilet tissue. A portion 18 (shown in hatched lines) proximate the center of each section 16a—n is then removed by cutting to form core two core sections 20a, 20b. The combined-length of the core sections 20a, 20b is thus less than the width of the toilet tissue to be wound onto the core sections 20a, 20b. In one implementation, the portion 18 that is removed from each section 16a—n preferably has a length of approximately 2.0 inches, so that the combined length of the core sections 20a, 20b is approximately 2.0 inches shorter in length than the tissue to be wound thereon. The tube 12 can have any convenient length from which a plurality of core sections can be formed, such as a length of approximately 115.0 inches.

Once the core sections 20a, 20b are formed, toilet tissue 22 is wound onto the core sections 20a, 20b with the core sections 20a, 20b being spaced apart from each other, as is evident from FIGS. 11 and 12 which illustrate a subsequently formed toilet tissue roll. As is further evident from FIGS. 11 and 12, the core sections 20a, 20b include ends 24a, 24b that face each other and which are spaced apart by approximately the distance 1 thereby forming a gap 25. The core sections 20a, 20b further include ends 26a, 26b that are even with the opposite side surfaces 28 of the tissue 22. Thus, there is a portion of the tissue 22 approximately midway between the side surfaces 28 that is not core supported due to the gap 25 between the ends 24a, 24b of the core sections 20a, 20b. The gap 25 between the core sections 20a, 20b remains until such time as the tissue 22 is substantially depleted from the roll.

As will be described below, the gap 25 between the core sections 20a, 20b facilitates sensing that the tissue is substantially depleted or exhausted from the roll. It is to be realized that the core sections 20a, 20b could be formed using methods other than that described above. For instance, instead of removing a single portion at the center of each section, portions could be removed from each end of a section and the section then cut in half to thereby form the core sections.

One implementation of a web material dispenser 50 is illustrated in FIGS. 1–5. With reference to FIG. 1, the dispenser 50 includes a rear housing portion 52 and a front housing portion 54 pivotally connected to the rear housing portion 52 at the bottom ends thereof via pivots 56. The housing portions 52, 54 include cooperating locking structures 58a, 58b at the top ends thereof, by which the housing portions 52, 54 can be locked together to form an enclosure for a plurality of rolls of toilet tissue.

The housing portions 52, 54 are generally circular in shape, with each including a generally circular end wall 60, 62 and a generally circular sidewall 64, 66. The end walls 60, 62 and sidewalls 64, 66 combine to form an interior space when the housing portion 54 is pivoted upward from the position shown in FIG. 1 and connected to rear housing portion 52, via the locking structures 58a, 58b. When the housing portions 52, 54 are locked together, the end walls 60, 62 face each other and the sidewalls 64, 66 fit together to form an enclosure. A dispensing opening 70 is formed by the sidewalls 64, 66 at the bottoms thereof through which tissue from one of the tissue rolls is dispensed.

The end wall 60 of the housing portion 52 is further provided with a plurality of slots 72 by which the housing portion 52 can be mounted to a wall or other fixed structure using bolts, screws or other suitable fasteners.

4

With reference to FIGS. 2 and 4, a spider 78 is rotatably mounted on the rear housing portion 52 for rotation about a central axis B in a clockwise direction as shown by the arrows in FIGS. 2 and 4. The spider 78 is generally circular in shape and includes a central boss 80 projecting from the center thereof parallel to the rotation axis B and toward the front housing portion 54. The boss 80 is sized to rotatably fit over a cylindrical hub 82 (best seen in FIG. 1) that projects from the end wall 60 of the rear housing portion 52 in the direction of the axis B. The boss 80 and hub 82 are preferably secured together via a snap fit connection that detachably connects the boss 80 and hub 82 together while permitting rotation of the boss 80, and thus the spider 78, on the hub 82.

In addition, an x-shaped formation 90, visible in FIGS. 1, 2 and 4, projects from the top end of the boss 80. Further, an actuation disk 92, shown in dashed lines in FIG. 1, is rotatably mounted on the front housing portion 54. The disk 92 is disposed on the exterior side of the end wall 62 whereby the disk is accessible from outside the housing 52, 54 by a user in order to rotate the spider 78. A plurality of circumferentially spaced fingers 94 project rearwardly from the disk 92 toward the rear housing portion 52, with a gap between each adjacent finger 94. The x-shaped formation 90 and the fingers 94 are sized such that they engage when the front housing portion 54 is pivoted to the closed position relative to the rear housing portion 52, with x-shaped formation 90 disposed within the gaps between the fingers 94. With this construction, rotation of the disk 92 causes rotation of the spider 78. A pair of diametrically opposite fingers 94 each include a shoulder 96 formed thereon which fit over a boss 98 projecting from the interior surface of the end wall 62 so as to rotatably secure the disk 92 to the end wall 62.

Returning to FIGS. 2 and 4, the spider 78 is shown to include a plurality of spools 100a–d, in this instance four spools, projecting from the spider 78 parallel to the axis B, with the spools disposed adjacent to the circumference of the spider 78. The spools 100a–d are spaced at 90 degree intervals around the spider 78. However, it would be possible to use a larger or lesser number of spools, depending upon the size of the tissue rolls and the needs of the consumer, in which case the spools would be spaced at intervals of 360 degrees divided by the number of spools. Each spool 100a–d is sized to receive thereon a tissue roll 102.

As shown in FIGS. 2 and 4, the circumference of the spider 78 is provided with a plurality of detents 104. Preferably, there is one detent 104 for each spool 100a–d disposed on the spider 78. A resilient indexing finger 106 is fixed at a first end thereof to the rear housing portion 52 and the second end thereof extends toward the spider for engagement within one of the detents 104. When the end of the finger 106 engages in a detent 104, rotation of the spider 78 in a counterclockwise direction is prevented, and one roll 102 is held at a dispensing position while a second roll 102 is at a reserve position (see FIG. 2). However, rotation of the spider 78 in a clockwise direction is selectively permitted, as described below.

A core stop 110 is further fixed to the rear housing portion 52 and extends along a radial axis toward the boss 80 of the spider 78 and into the rotation path of the spools 100a–d and rolls 102. The rotation path of the spools 100a–d is shown in dashed lines in FIG. 4, and includes an outer rotation path P_o defined by the radially outermost point of the spools 100a–d as the spider rotates, an inner rotation path P_i defined by the radially innermost point of the spools, and a central

US 6,648,267 B2

5

rotation path P_c defined by the central point of the spools. As used herein, rotation path is meant to include at least one of the paths P_o , P_c , and P_i .

The core stop 110, as best seen in FIG. 5, includes a first portion 112 extending parallel to the spools 100a-d and a second portion 114 that extends perpendicular to the spools. The second portion 114 extends toward and crosses the outer, central and inner rotation paths of the spools 100a-d and includes a bottom edge 116 that is spaced a distance d above the spider 78. Further, as illustrated in FIG. 3, the second portion 114 includes a front surface 118 that is sloped toward the bottom edge 116 in the direction of rotation of the spider 78.

With reference to FIGS. 2-5, a "double core" type of roll, such as the roll described in FIGS. 11 and 12, is loaded onto each spool 100a-d. The rolls 102 are shown as being mounted onto the spools 100a-d such that the core sections 20a are above the core sections 20b. However, the rolls 102 could be mounted such that the core sections 20b are positioned above the core sections 20a.

As shown in FIG. 3, the distance d, between the side surfaces 28 of the tissue 22 is greater than the distance d between the bottom edge 116 of the second portion 114 of the core stop 110 and the spider 78. Thus, the tissue 22 will contact the second portion 114 of the core stop 110, if a user tries to rotate the spider 78, and thereby prevent clockwise rotation of the spider 78. The tissue 22 will retain the core sections 20a, 20b in their spaced apart condition until such time as the tissue 22 has been substantially depleted or exhausted from the roll, and rotation of the spider 78 will be prevented. It is important to realize that the distance d is greater than the length of the spools 100a-d, as evident from FIG. 5, such that, during rotation of the spider 78, the spools can travel under the bottom edge 116 of the core stop 110.

However, referring to FIGS. 4 and 5, once the tissue 22 has been substantially depleted or exhausted, if a user rotates the spider 78 in a clockwise direction, the angled front surface 118 will cause the core section 20a to be forced downward toward the core section 20b. Thus, as evident from FIG. 5, the core sections 20a, 20b and the spool 100a can travel under the bottom edge 116 to permit the spider 78 to be rotated so as to bring the next reserve tissue roll into the dispensing position.

Thus, the core stop 110 acts as a means for sensing that the tissue has been exhausted from the roll currently at the dispensing position. Once the tissue has been exhausted, the spider can be manually rotated in the clockwise direction to bring the reserve roll to the dispensing position. Since the reserve roll has tissue thereon, the tissue contacts the core stop 110 and prevents further rotation of the spider until the reserve roll is itself exhausted of tissue.

FIGS. 6-9 illustrate another embodiment of a dispenser 150. The dispenser 150 is similar to the dispenser 50 of FIGS. 1-5, except that the dispenser 150 uses a different core stop 152. The core stop 152 in FIGS. 6-9 is configured to function with the gap 25 between the core sections 20a, 20b in order to sense the depletion of tissue from the roll.

With reference to FIG. 9, it is seen that the core stop 152 includes a vertical portion 154 extending parallel to the spools. A finger 156 projects from the vertical portion 154 approximately midway along the length thereof, and extends along a radial axis toward the boss 80 of the spider 78. In this embodiment, the distal end of the finger 156 preferably extends at least past the outer rotation path P_o defined by the radially outermost point of the spools 100a-d, but no further than the central rotation path P_c . Preferably, the end of the

6

finger is located adjacent the central rotation path, although the end could be located between the outer and central paths as well. Each spool 100a-d is formed with a cut-out 158 that, when a roll 102 is mounted on each spool, is positioned adjacent the gap 25. The cut-out 158 is defined over approximately one-half of the circumference of each spool.

The core stop 152 functions as follows. When tissue 22 in the roll 102, the tissue 22 will contact the finger 156 and rotation of the spider 78 is prevented. The spider will be prevented from rotating as long as tissue remains on the roll. However, once the tissue 22 has been substantially depleted or exhausted, the cut-out 158 will be uncovered, and the finger 156 can then pass through the cut-out 158 in the spool 100a to permit rotation of the spider to bring the next reserve roll to the dispensing position. Thus, in this embodiment, the core sections 20a, 20b remain generally spaced apart.

It is contemplated that rotation of the spider 78 could be caused by a user when a small amount of tissue remains on the roll, in which case sufficient force would need to be applied to overcome the force of the tissue that remains covering the gap 25 and the cut-out 158. Under most circumstances, the force required to produce such a rotation would be sufficiently large so as to deter rotation until the tissue has been substantially depleted or exhausted.

It is to be realized that the dispensers 50, 150 described herein could be utilized with tissue rolls other than those described herein and still be in accordance with the principles of the invention. Furthermore, the tissue rolls described herein could be utilized on dispensers other than those described herein and still be in accordance with the principles of the invention.

The above specification, examples and data provide a complete description of the manufacture and use of the composition of the invention. Since many embodiments of the invention can be made without departing from the spirit and scope of the invention, the invention resides in the claims hereinafter appended.

We claim:

1. A web material dispenser, comprising:

a housing;

a plurality of spools at least one of which is disposed within said housing, a first one of said spools is configured to receive a first web material roll thereon for dispensing web material from the first roll, and a second one of said spools is configured to receive a second web material roll thereon for dispensing web material from the second roll, each of said first and second rolls includes first and second core sections disposed on the respective spool in a colinear relationship, a web material wound onto the core sections, and the core sections being spaced apart from each other and defining a gap therebetween;

wherein the dispenser is configured to dispense web material from the first roll and the second roll is a reserve roll, and the dispenser includes a sensor that is configured for sensing when the web becomes depleted from the first roll, wherein said sensor cooperates with the gap in the first roll while the core sections thereof are disposed on the spool to sense depletion of web material therefrom; and

wherein when depletion of web material from the first roll is sensed, the dispenser is configured to dispense web material from the second roll.

2. The web material dispenser according to claim 1, wherein said sensor is configured to reduce the gap between the core sections of the first roll when the web material is depleted therefrom.

US 6,648,267 B2

7

3. The web material dispenser according to claim 1, wherein said sensor extends into said gap upon deletion of web material from the first roll.

4. The web material dispenser according to claim 1, wherein the colinear relationship of the first and second core sections on the spool is substantially maintained once the web material is depleted from the first roll.

5. A method of forming a roll of web material, comprising:

providing an elongate, generally cylindrical tube having a longitudinal axis;

forming a plurality of generally cylindrical core sections from said tube, at least two of said core sections having a combined length that is less than the width of web material to be wound onto the two core sections;

aligning and separating said two core sections such that longitudinal axes of said core sections are colinear and there is a gap between said two core sections; and

winding web material onto said two core sections.

6. The method of claim 5, wherein said two core sections are separated such that the combined length of said two core sections and said gap is equal to the width of said web material.

8

7. The method of claim 6, wherein the web material is a paper based web material.

8. The method of claim 7, wherein the web material comprises paper towels.

9. The method of claim 5, wherein said two core sections each have the same length.

10. A roll of web material produced according to the method of claim 5.

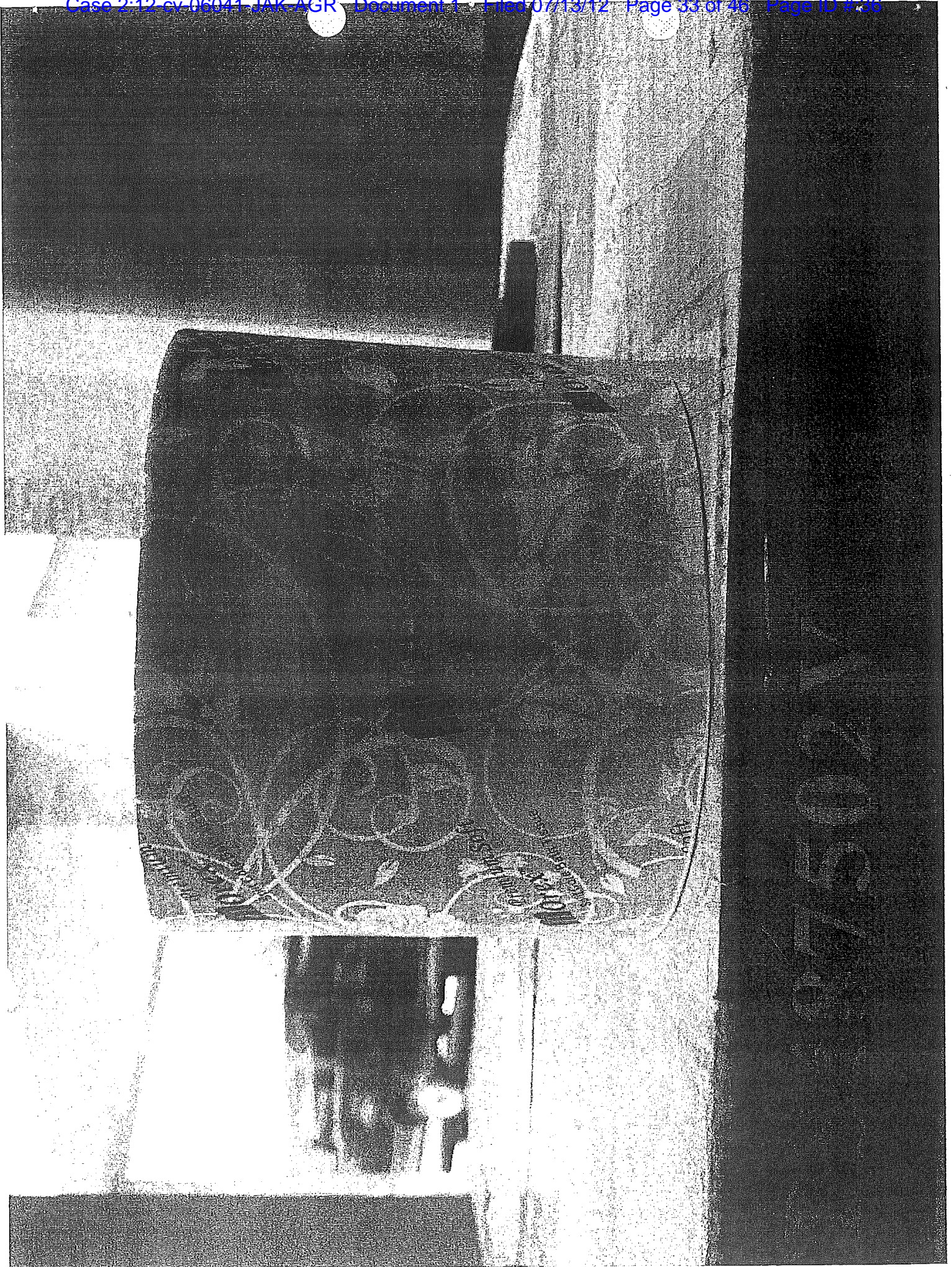
11. A method of using a web material roll having first and second colinear core sections spaced apart from each other defining a gap therebetween, and web material wound onto said core sections and simultaneously contacting each said core section, the method comprising:

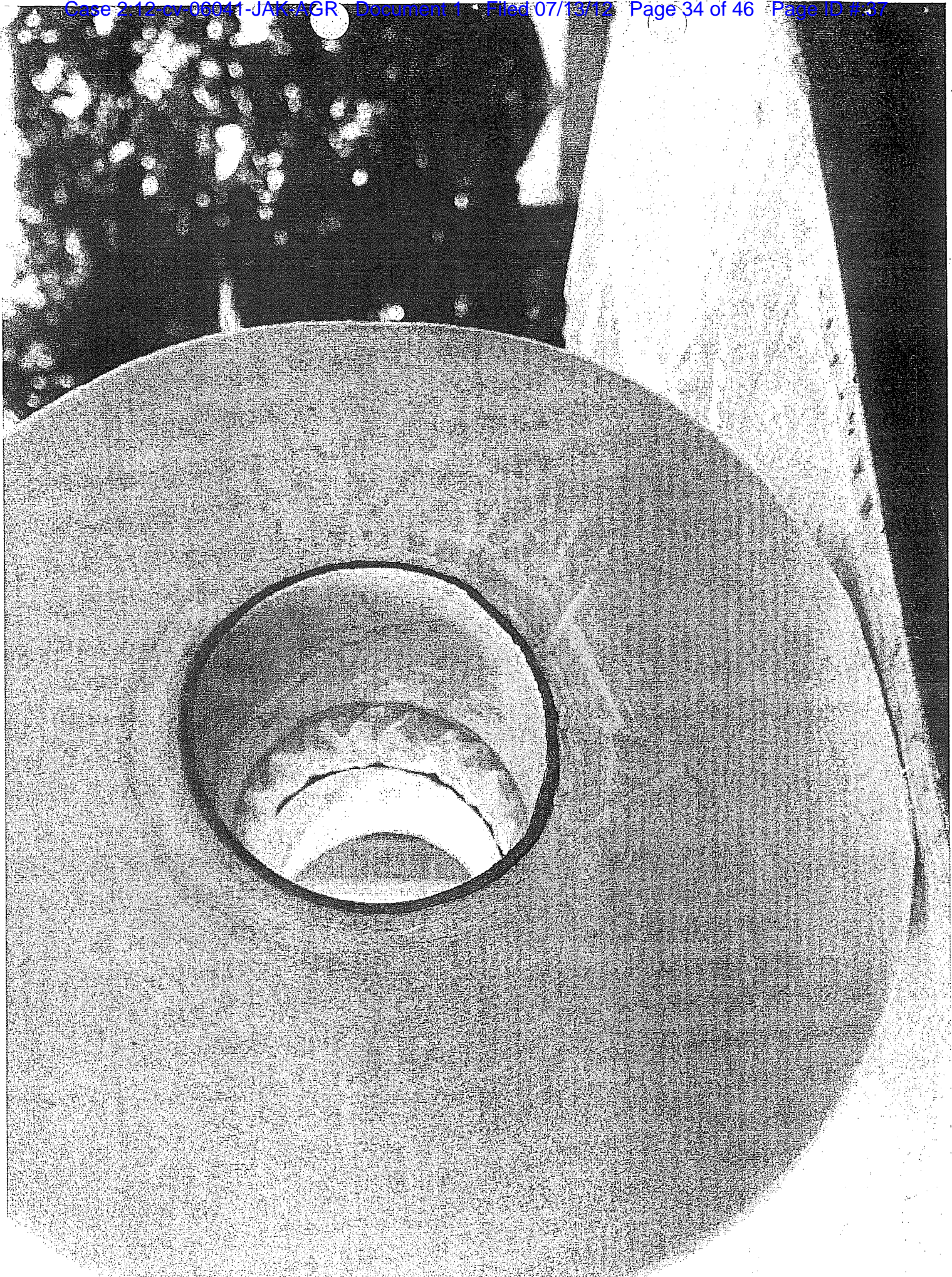
mounting the roll in a dispenser to dispense the web material, said dispenser including a sensing mechanism that senses the web material; and

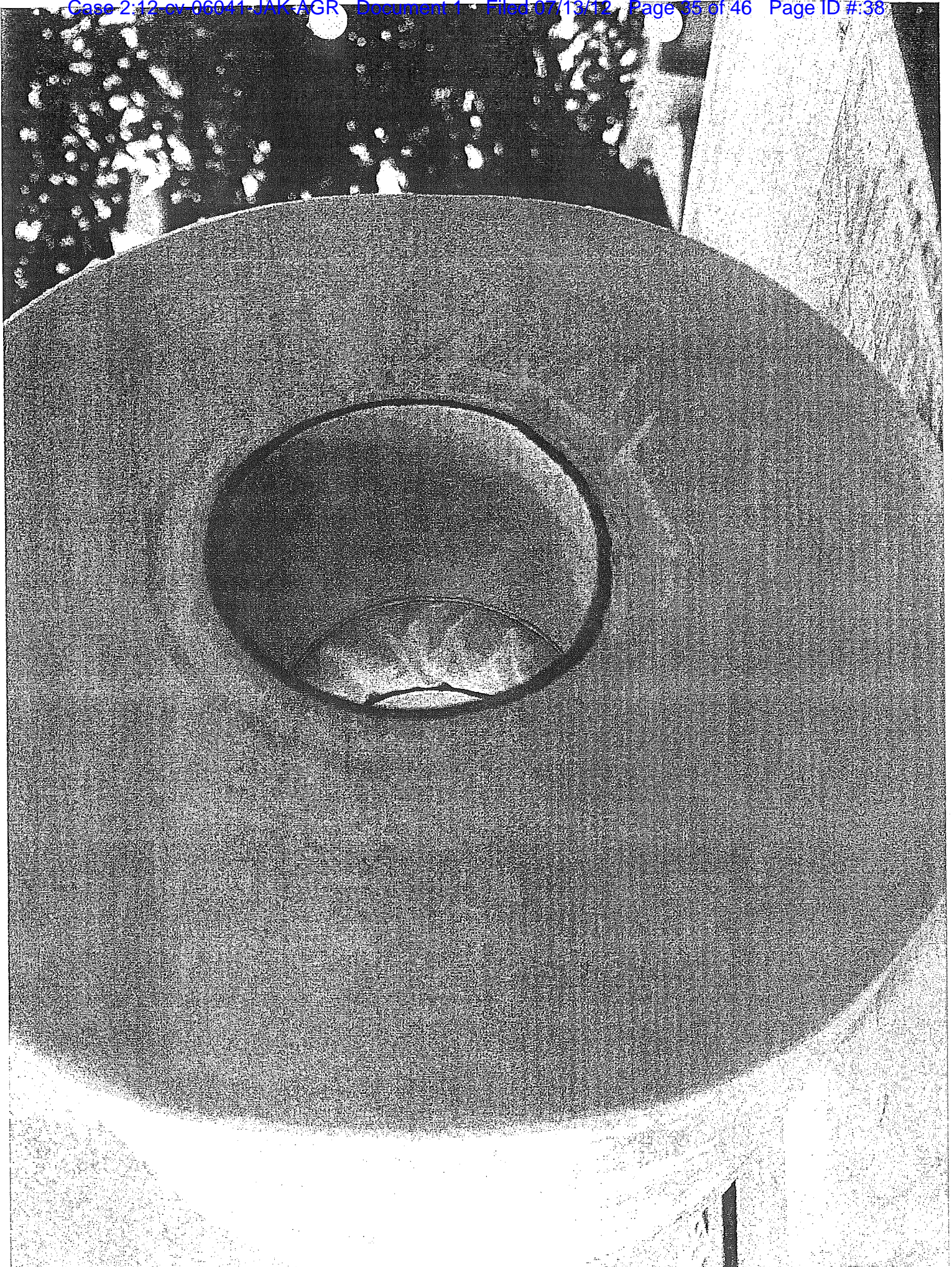
maintaining a substantially colinear relationship of the first and second core sections within the dispenser when the sensing mechanism senses substantial depletion of the web material.

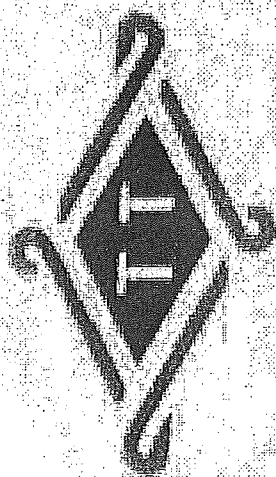
* * * * *

Exhibit C









Teh Tung Corporation

Reorder #

TPS487502V

Description: Virgin Toilet Tissue. 2 ply

4.0 x 3.75" 750 sheets, 48 rolls CS

Address:

12110 Altamar Place Santa Fe Springs, CA. 90670

Tel: (562) 903-8000 Fax: (562) 903-8001

Web site: www.tehtung.com

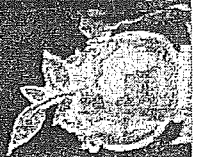
REORDER # TPS487502V

Premium

48 Rolls, 750 Sheets
4.0" X 3.7"

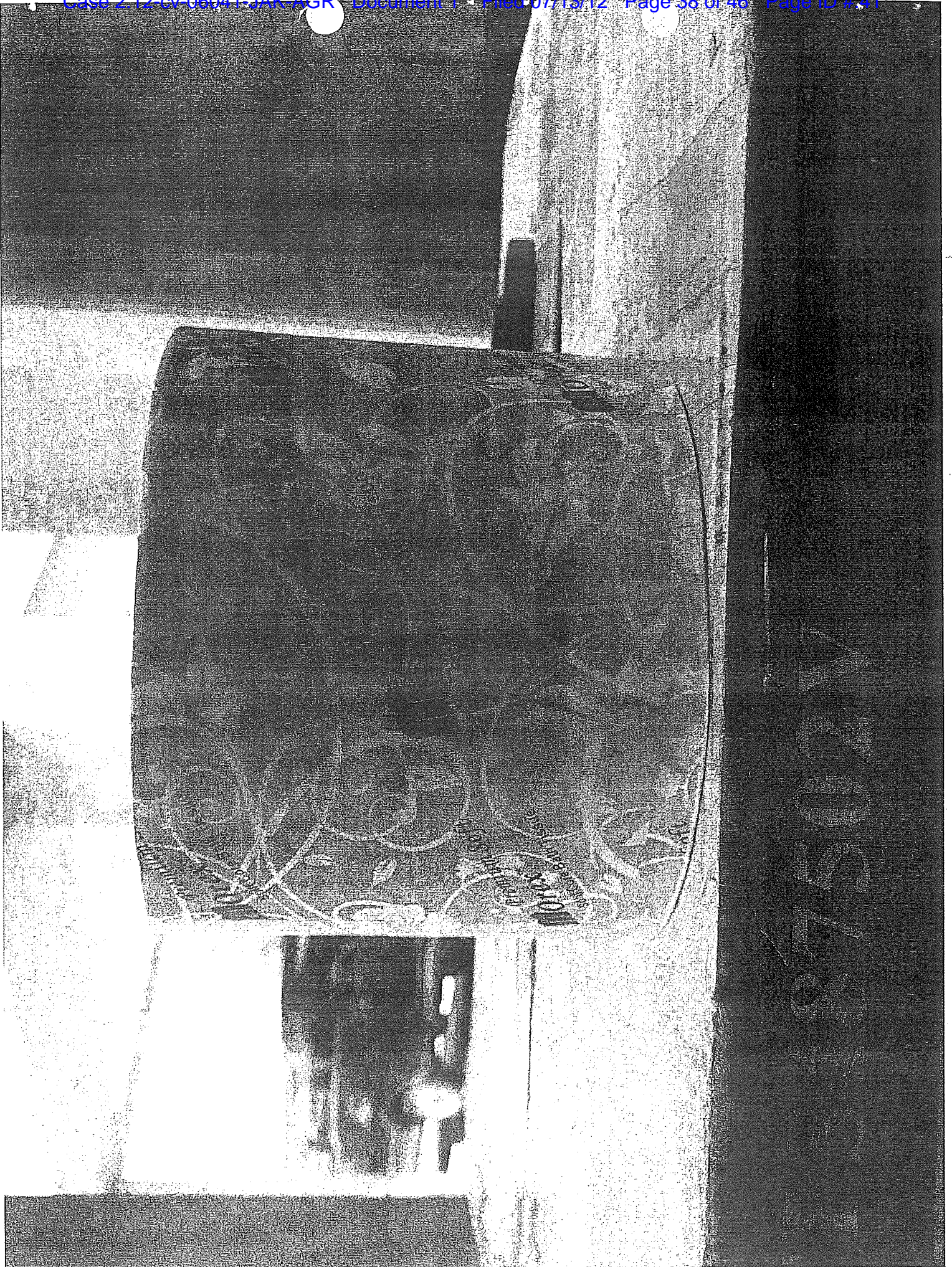
TOILET TISSUE

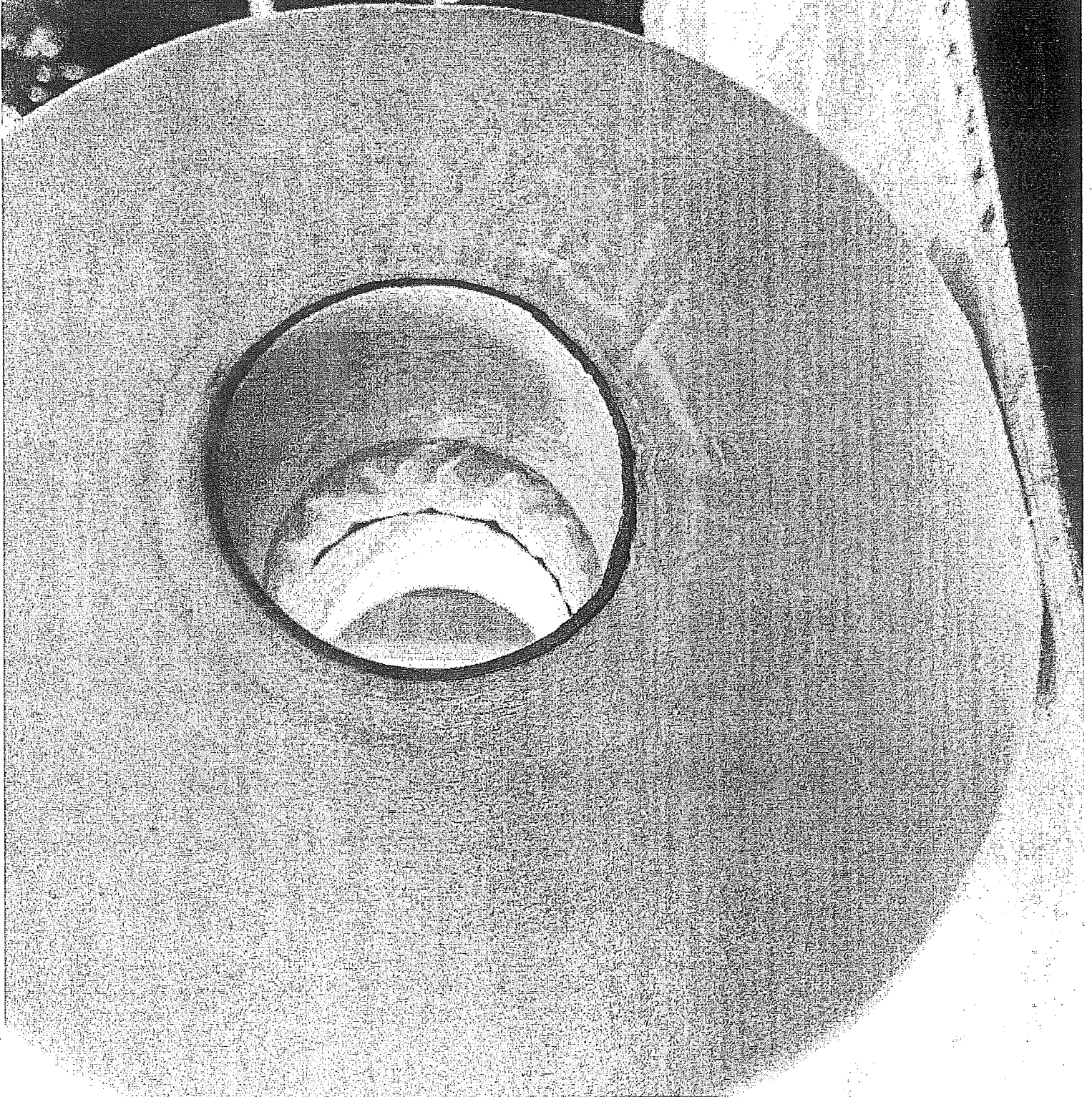
2 Ply

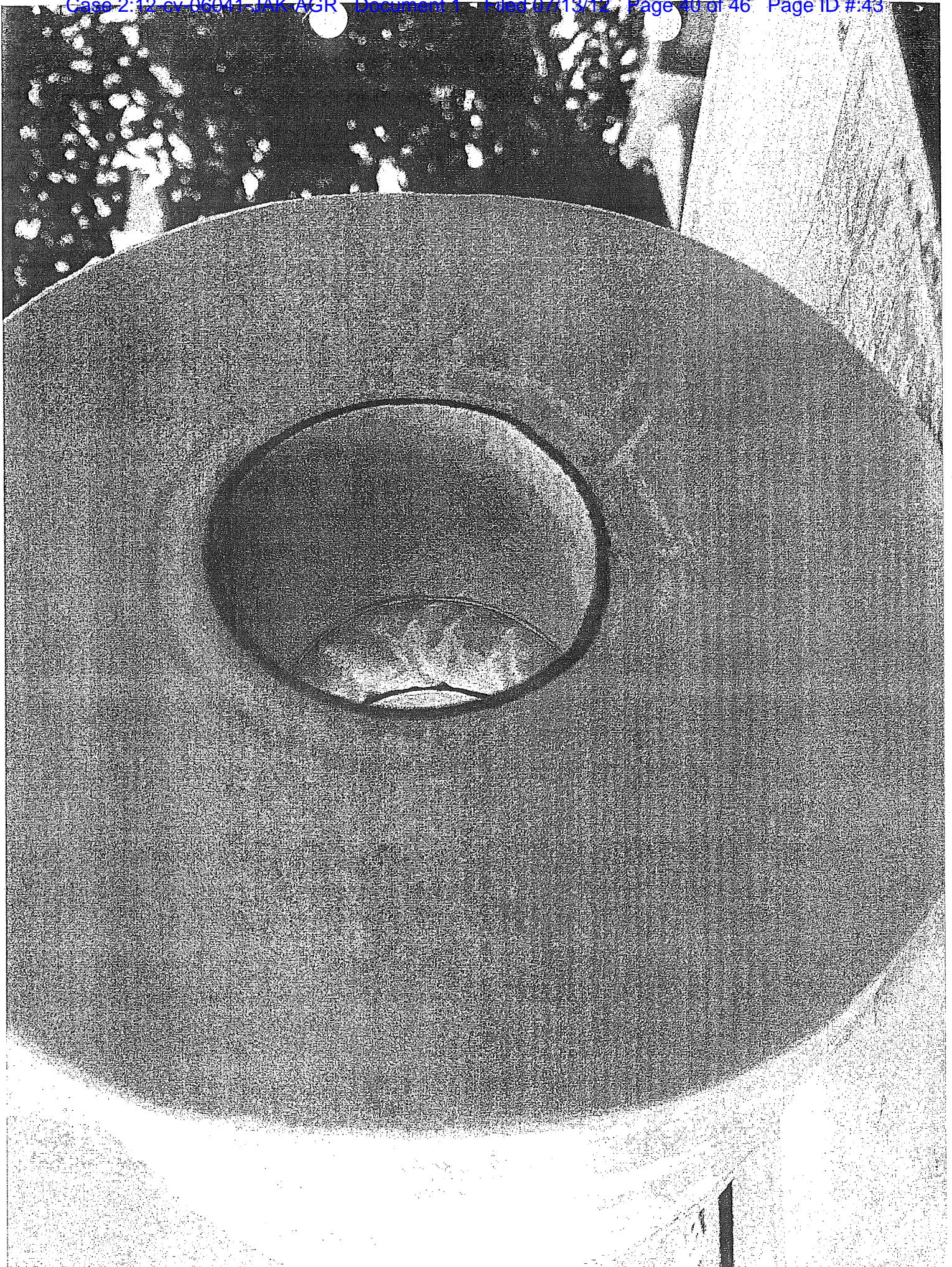


Mopex™ QUALITY PRODUCTS
RESPECT THE ENVIRONMENT





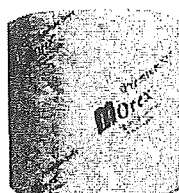
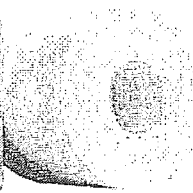
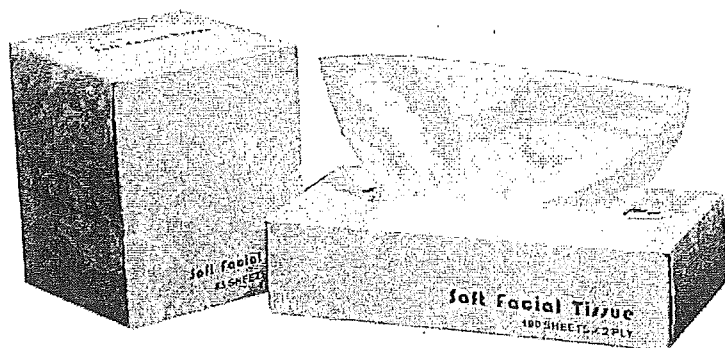
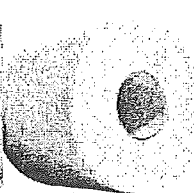
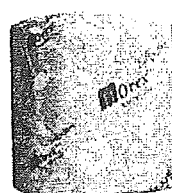
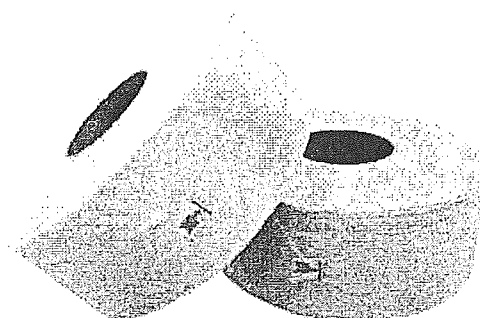




Morex

Toilet Tissue

PRODUCT INTRODUCTION

*Bath Tissue Premium Soft**Bath Tissue Silky Soft**Facial Tissue**Jumbo Roll Tissue*

Facial Tissue

SKU	Specification	Case Dimension	Case Cube	Case Net Weight
FT301002	Premium Facial Tissue 2Ply, White, 7.68" x 8.25", 30/100	17.13 x 10.43 x 13.39"	1.38CFT	9.18 lbs
CFT36852	Premium Cubed Facial Tissue 2 Ply, White, 7.68" x 8.25", 36/85	26.57 x 13.39 x 10.63"	2.19 CFT	9.75 lbs
HSF200402	Premium Handi Sani Facial Tissue 2Ply, White, 7.87" x 4", 40/200	22.05 x 8.86 x 23.62"	2.67 CFT	21.16 lbs

Bath Tissue Standard 1 ply

SKU	Specification	Case Dimension	Case Cube	Case Net Weight
TPS4815001V	Premium Split Core Bath Tissue 4.0 x 3.75" 1500 Sheets, 48 Rolls/Case	20.47 x 15.75 x 16.54"	3.09 CFT	21.96 lbs
TP2425001V	Premium Bath Tissue 4.05 x 3.5" 2500 Sheets, 24 Rolls/Case	24.02 x 18.11 x 7.48"	1.88CFT	15.86 lbs
TP4810001	Recycled Bath Tissue 4.25 x 3.5" 1000 sheets, 48 Rolls/Case	17.32 x 12.99 x 17.32"	2.25 CFT	16.98 lbs
TP6015001	Recycled Bath Tissue 4.25 x 3.5" 1500 Sheets, 60 Rolls/Case	24.80 x 14.96 x 17.32"	3.72CFT	31.16 lbs
TP9610001L	Recycled Bath Tissue 4.5 x 4.0" 1000 Sheets, 96 Rolls/Case	26.77 x 18.11 x 18.11"	5.08 CFT	41.36 lbs
TP9610001	Recycled Bath Tissue 4.25 x 3.5" 1000 Sheets, 96 Rolls/Case	25.20 x 16.93 x 17.32"	4.28 CFT	33.96 lbs
TP9610001V	Premium Bath Tissue 4.25 x 3.5" 1000 Sheets, 96 Rolls/Case	26.77 x 17.72 x 17.32"	4.75 CFT	37.11 lbs

Morex

Toilet Tissue

Bath Tissue Standard 2 ply

SKU	Specification	Case Dimension	Case Cube	Case Net Weight
TPS487502V	Premium Split Core Bath Tissue 4.0 x 3.75" 750 sheets, 48 Rolls/Case	20.47x15.75x16.54"	3.09 CFT	21.96 lbs
TP485002	Recycled Bath Tissue 4.25 x 3.5" 500 Sheets, 48 Rolls/Case	17.32x12.99x17.32"	2.25 CFT	15.99 lbs
TP965002V	Premium Bath Tissue 4.25 x 3.75" 500 sheets, 96 rolls/Case	26.38x17.91x17.32"	4.74 CFT	31.31 lbs
TP965002L	Recycled Bath Tissue 4.5x4.0" 500 Sheets, 96 Rolls/Case	26.77x18.11x18.11"	5.08 CFT	38.99 lbs
TP965002	Recycled Bath Tissue 4.25 x 3.5" 500 Sheets, 96 Rolls/case	25.2x16.93x17.32"	4.28 CFT	31.99 lbs
TP805002V	Premium Bath Tissue 4.25 x 3.75" 500 Sheets, 80 Rolls/Case	22.24x17.91x17.32"	3.99 CFT	26.49 lbs

Jumbo Roll Tissue 1 ply

SKU	Specification	Case Dimension	Case Cube	Case Net Weight
JRT1220001E	Recycled Jr. Jumbo Roll Tissue 9" Diameter, 3.3" Core, 12 Pcs/ Case	18.11x18.11x10.83"	2.05 CFT	15.09 lbs
JRT1220001	Recycled Jr. Jumbo Roll Tissue 9" Diameter, 3.3" Core, 12 Pcs/ Case	18.11x18.11x10.83"	2.05 CFT	19.74 lbs
JRT1220001L	Recycled Jr. Jumbo Roll Tissue , 2000' 9" Diameter, 3.3" Core, 12 Pcs/ Case	18.11x18.11x10.83"	2.05 CFT	23.25 lbs
JRT640001	Recycled Sr. Jumbo Roll Tissue 12" Diameter, 3.3" Core, 6 Pcs/ Case	23.82x12.01x10.83"	1.79 CFT	16.92 lbs

Jumbo Roll Tissue 2 ply

SKU	Specification	Case Dimension	Case Cube	Case Net Weight
JRT1210002E	Recycled Jr. Jumbo Roll Tissue 9" Diameter, 3.3" Core 3.55 Width, 12 Pcs/ Case	18.11x18.11x10.83"	2.05 CFT	14.26 lbs
JRT1210002	Recycled Jr. Jumbo Roll Tissue 9" Diameter, 3.3" Core 3.55 Width, 12 Pcs/ Case	18.11x18.11x10.83"	2.05 CFT	17.52 lbs
JRT1210002L	Recycled Jr. Jumbo Roll Tissue , 1000' 9" Diameter, 3.3" Core 3.55 Width, 12 Pcs/ Case	18.11x18.11x10.83"	2.05 CFT	21.87 lbs
JRT1210002V	Premium Jr. Jumbo Roll Tissue 9" Diameter, 3.3" Core 3.55" Width, 12 Pcs/ Case	18.11x18.11x10.83"	2.05 CFT	16.87 lbs
JRT1210002LV	Premium Jr. Jumbo Roll Tissue 1000' 9" Diameter, 3.3" Core 1000' 3.55" Width, 12 Pcs/ Case	18.11x18.11x10.83"	2.05 CFT	19.8 lbs
JRT620002	Recycled Sr. Jumbo Roll Tissue 12" Diameter, 3.3" Core, 6 Pcs/ Case	24.02x12.2x10.83"	1.84 CFT	16.92 lbs
JRT620002L	Recycled Sr. Jumbo Roll Tissue 2000' 12" Diameter, 3.3" Core, 6 Pcs/ Case	24.02x12.2x10.83"	1.84 CFT	21.27 lbs
JRT810002	Recycled Jr. Jumbo Roll Tissue 9" Diameter, 3.3" Core, 8 Pcs/ Case	18.31x18.31x7.68"	1.42 CFT	11.68 lbs
JRT810002L	Recycled Jr. Jumbo Roll Tissue , 1000' 9" Diameter, 3.3" Core 1000' 3.55" Width, 8 Pcs/ Case	18.11x18.11x7.48"	1.42 CFT	14.58 lbs

*Recycled Products are Made From 100% Post Consumer Recycled Paper and Meets and Exceeds Environmental Protection Agency (EPA) Requirement for Post Consumer Recovered Fiber Content

*Premium Products are Made From Rapidly Renewable Green Paper That Is Consist of 60-75% Sugarcane Pulp and Bamboo Pulp.

**UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA**

NOTICE OF ASSIGNMENT TO UNITED STATES MAGISTRATE JUDGE FOR DISCOVERY

This case has been assigned to District Judge John Kronstadt and the assigned discovery Magistrate Judge is Alicia G. Rosenberg.

The case number on all documents filed with the Court should read as follows:

CV12- 6041 JAK (AGR~~x~~)

Pursuant to General Order 05-07 of the United States District Court for the Central District of California, the Magistrate Judge has been designated to hear discovery related motions.

All discovery related motions should be noticed on the calendar of the Magistrate Judge

=====

NOTICE TO COUNSEL

A copy of this notice must be served with the summons and complaint on all defendants (if a removal action is filed, a copy of this notice must be served on all plaintiffs).

Subsequent documents must be filed at the following location:

☒ **Western Division**
312 N. Spring St., Rm. G-8
Los Angeles, CA 90012

☐ **Southern Division**
411 West Fourth St., Rm. 1-053
Santa Ana, CA 92701-4516

☐ **Eastern Division**
3470 Twelfth St., Rm. 134
Riverside, CA 92501

Failure to file at the proper location will result in your documents being returned to you.

for the

WAUSAU PAPER TOWEL & TISSUE,
LLC, a Wisconsin limited liability company,

Plaintiff(s)

y.

TEH TUNG CORPORATION, a California corporation

Defendant(s)

CV 12-00041 JAL (AGBx)

Civil Action No. _____

To: (Defendant's name and address)

A lawsuit has been filed against you.

Within 21 days after service of this summons on you (not counting the day you received it) — or 60 days if you are the United States or a United States agency, or an officer or employee of the United States described in Fed. R. Civ. P. 12 (a)(2) or (3) — you must serve on the plaintiff an answer to the attached complaint or a motion under Rule 12 of the Federal Rules of Civil Procedure. The answer or motion must be served on the plaintiff or plaintiff's attorney, whose name and address are: Erica J. Van Loon, Esq.

Erica J. Van Loon, Esq.
Glaser Weil Fink Jacobs Howard Avchen & Shapiro LLP
10250 Constellation Blvd., 19th Floor
Los Angeles, CA 90067

If you fail to respond, judgment by default will be entered against you for the relief demanded in the complaint. You also must file your answer or motion with the court.

JUL 13 2012

CLERK OF COURT

Date: _____

Signature of Clerk or Deputy Clerk

UNITED STATES DISTRICT COURT, CENTRAL DISTRICT OF CALIFORNIA
CIVIL COVER SHEET

I (a) PLAINTIFFS (Check box if you are representing yourself <input type="checkbox"/>) WAUSAU PAPER TOWEL & TISSUE, LLC		DEFENDANTS TEH TUNG CORPORATION	
(b) Attorneys (Firm Name, Address and Telephone Number. If you are representing yourself, provide same.) ERICA J. VAN LOON (310) 553-3000 Glaser Weil Fink Jacobs Howard Avchen & Shapiro LLP 10250 Constellation Blvd., 19th Flr., Los Angeles, CA 90067		Attorneys (If Known)	

II. BASIS OF JURISDICTION (Place an X in one box only.) <input type="checkbox"/> 1 U.S. Government Plaintiff <input checked="" type="checkbox"/> 3 Federal Question (U.S. Government Not a Party) <input type="checkbox"/> 2 U.S. Government Defendant <input type="checkbox"/> 4 Diversity (Indicate Citizenship of Parties in Item III)	III. CITIZENSHIP OF PRINCIPAL PARTIES - For Diversity Cases Only (Place an X in one box for plaintiff and one for defendant.) <table style="width:100%; border: none;"> <tr> <td style="width:30%;"></td> <td style="width:10%; text-align: center;">PTF</td> <td style="width:10%; text-align: center;">DEF</td> <td style="width:40%;"></td> <td style="width:10%; text-align: center;">PTF</td> <td style="width:10%; text-align: center;">DEF</td> </tr> <tr> <td>Citizen of This State</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td>Incorporated or Principal Place of Business in this State</td> <td style="text-align: center;"><input type="checkbox"/> 4</td> <td style="text-align: center;"><input type="checkbox"/> 4</td> </tr> <tr> <td>Citizen of Another State</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td>Incorporated and Principal Place of Business in Another State</td> <td style="text-align: center;"><input type="checkbox"/> 5</td> <td style="text-align: center;"><input type="checkbox"/> 5</td> </tr> <tr> <td>Citizen or Subject of a Foreign Country</td> <td style="text-align: center;"><input type="checkbox"/> 3</td> <td style="text-align: center;"><input type="checkbox"/> 3</td> <td>Foreign Nation</td> <td style="text-align: center;"><input type="checkbox"/> 6</td> <td style="text-align: center;"><input type="checkbox"/> 6</td> </tr> </table>		PTF	DEF		PTF	DEF	Citizen of This State	<input type="checkbox"/> 1	<input type="checkbox"/> 1	Incorporated or Principal Place of Business in this State	<input type="checkbox"/> 4	<input type="checkbox"/> 4	Citizen of Another State	<input type="checkbox"/> 2	<input type="checkbox"/> 2	Incorporated and Principal Place of Business in Another State	<input type="checkbox"/> 5	<input type="checkbox"/> 5	Citizen or Subject of a Foreign Country	<input type="checkbox"/> 3	<input type="checkbox"/> 3	Foreign Nation	<input type="checkbox"/> 6	<input type="checkbox"/> 6
	PTF	DEF		PTF	DEF																				
Citizen of This State	<input type="checkbox"/> 1	<input type="checkbox"/> 1	Incorporated or Principal Place of Business in this State	<input type="checkbox"/> 4	<input type="checkbox"/> 4																				
Citizen of Another State	<input type="checkbox"/> 2	<input type="checkbox"/> 2	Incorporated and Principal Place of Business in Another State	<input type="checkbox"/> 5	<input type="checkbox"/> 5																				
Citizen or Subject of a Foreign Country	<input type="checkbox"/> 3	<input type="checkbox"/> 3	Foreign Nation	<input type="checkbox"/> 6	<input type="checkbox"/> 6																				

IV. ORIGIN (Place an X in one box only.) <input checked="" type="checkbox"/> 1 Original Proceeding <input type="checkbox"/> 2 Removed from State Court <input type="checkbox"/> 3 Remanded from Appellate Court <input type="checkbox"/> 4 Reinstated or Reopened <input type="checkbox"/> 5 Transferred from another district (specify): <input type="checkbox"/> 6 Multi-District Litigation <input type="checkbox"/> 7 Appeal to District Judge from Magistrate Judge
--

V. REQUESTED IN COMPLAINT: JURY DEMAND: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Check 'Yes' only if demanded in complaint.) CLASS ACTION under F.R.C.P. 23: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No MONEY DEMANDED IN COMPLAINT: \$ According to proof at trial
--

VI. CAUSE OF ACTION (Cite the U.S. Civil Statute under which you are filing and write a brief statement of cause. Do not cite jurisdictional statutes unless diversity.) Patent Infringement (35 U.S.C. §§ 271; 282-285)
--

VII. NATURE OF SUIT (Place an X in one box only.)					
OTHER STATUTES <input type="checkbox"/> 400 State Reapportionment <input type="checkbox"/> 410 Antitrust <input type="checkbox"/> 430 Banks and Banking <input type="checkbox"/> 450 Commerce/ICC Rates/etc. <input type="checkbox"/> 460 Deportation <input type="checkbox"/> 470 Racketeer Influenced and Corrupt Organizations <input type="checkbox"/> 480 Consumer Credit <input type="checkbox"/> 490 Cable/Sat TV <input type="checkbox"/> 810 Selective Service <input type="checkbox"/> 850 Securities/Commodities/Exchange <input type="checkbox"/> 875 Customer Challenge 12 USC 3410 <input type="checkbox"/> 890 Other Statutory Actions <input type="checkbox"/> 891 Agricultural Act <input type="checkbox"/> 892 Economic Stabilization Act <input type="checkbox"/> 893 Environmental Matters <input type="checkbox"/> 894 Energy Allocation Act <input type="checkbox"/> 895 Freedom of Info. Act <input type="checkbox"/> 900 Appeal of Fee Determination Under Equal Access to Justice <input type="checkbox"/> 950 Constitutionality of State Statutes	CONTRACT <input type="checkbox"/> 110 Insurance <input type="checkbox"/> 120 Marine <input type="checkbox"/> 130 Miller Act <input type="checkbox"/> 140 Negotiable Instrument <input type="checkbox"/> 150 Recovery of Overpayment & Enforcement of Judgment <input type="checkbox"/> 151 Medicare Act <input type="checkbox"/> 152 Recovery of Defaulted Student Loan (Excl. Veterans) <input type="checkbox"/> 153 Recovery of Overpayment of Veteran's Benefits <input type="checkbox"/> 160 Stockholders' Suits <input type="checkbox"/> 190 Other Contract <input type="checkbox"/> 195 Contract Product Liability <input type="checkbox"/> 196 Franchise <input type="checkbox"/> 210 Land Condemnation <input type="checkbox"/> 220 Foreclosure <input type="checkbox"/> 230 Rent Lease & Ejectment <input type="checkbox"/> 240 Torts to Land <input type="checkbox"/> 245 Tort Product Liability <input type="checkbox"/> 290 All Other Real Property	TORTS PERSONAL INJURY <input type="checkbox"/> 310 Airplane <input type="checkbox"/> 315 Airplane Product Liability <input type="checkbox"/> 320 Assault, Libel & Slander <input type="checkbox"/> 330 Fed. Employers' Liability <input type="checkbox"/> 340 Marine <input type="checkbox"/> 345 Marine Product Liability <input type="checkbox"/> 350 Motor Vehicle <input type="checkbox"/> 355 Motor Vehicle Product Liability <input type="checkbox"/> 360 Other Personal Injury <input type="checkbox"/> 362 Personal Injury-Med Malpractice <input type="checkbox"/> 365 Personal Injury-Product Liability <input type="checkbox"/> 368 Asbestos Personal Injury Product Liability IMMIGRATION <input type="checkbox"/> 462 Naturalization Application <input type="checkbox"/> 463 Habeas Corpus-Alien Detainee <input type="checkbox"/> 465 Other Immigration Actions	TORTS PERSONAL PROPERTY <input type="checkbox"/> 370 Other Fraud <input type="checkbox"/> 371 Truth in Lending <input type="checkbox"/> 380 Other Personal Property Damage <input type="checkbox"/> 385 Property Damage Product Liability BANKRUPTCY <input type="checkbox"/> 422 Appeal 28 USC 158 <input type="checkbox"/> 423 Withdrawal 28 USC 157 CIVIL RIGHTS <input type="checkbox"/> 441 Voting <input type="checkbox"/> 442 Employment <input type="checkbox"/> 443 Housing/Accommodations <input type="checkbox"/> 444 Welfare <input type="checkbox"/> 445 American with Disabilities - Employment <input type="checkbox"/> 446 American with Disabilities - Other <input type="checkbox"/> 440 Other Civil Rights	PRISONER PETITIONS <input type="checkbox"/> 510 Motions to Vacate Sentence <input type="checkbox"/> 530 General Habeas Corpus <input type="checkbox"/> 535 Death Penalty <input type="checkbox"/> 540 Mandamus/Other <input type="checkbox"/> 550 Civil Rights <input type="checkbox"/> 555 Prison Condition FORFEITURE / PENALTY <input type="checkbox"/> 610 Agriculture <input type="checkbox"/> 620 Other Food & Drug <input type="checkbox"/> 625 Drug Related Seizure of Property 21 USC 881 <input type="checkbox"/> 630 Liquor Laws <input type="checkbox"/> 640 R.R. & Truck <input type="checkbox"/> 650 Airline Regs <input type="checkbox"/> 660 Occupational Safety/Health <input type="checkbox"/> 690 Other	LABOR <input type="checkbox"/> 710 Fair Labor Standards Act <input type="checkbox"/> 720 Labor/Mgmt. Relations <input type="checkbox"/> 730 Labor/Mgmt. Reporting & Disclosure Act <input type="checkbox"/> 740 Railway Labor Act <input type="checkbox"/> 790 Other Labor Litigation <input type="checkbox"/> 791 Empl. Ret. Inc. Security Act PROPERTY RIGHTS <input type="checkbox"/> 820 Copyrights <input checked="" type="checkbox"/> 830 Patent <input type="checkbox"/> 840 Trademark SOCIAL SECURITY <input type="checkbox"/> 861 HIA (1395ff) <input type="checkbox"/> 862 Black Lung (923) <input type="checkbox"/> 863 DIWC/DIWW (405(g)) <input type="checkbox"/> 864 SSID Title XVI <input type="checkbox"/> 865 RSI (405(g)) FEDERAL TAX SUITS <input type="checkbox"/> 870 Taxes (U.S. Plaintiff or Defendant) <input type="checkbox"/> 871 IRS-Third Party 26 USC 7609

CV 12-06041

FOR OFFICE USE ONLY: Case Number: _____

AFTER COMPLETING THE FRONT SIDE OF FORM CV-71, COMPLETE THE INFORMATION REQUESTED BELOW.

UNITED STATES DISTRICT COURT, CENTRAL DISTRICT, CALIFORNIA
CIVIL COVER SHEETVIII(a). IDENTICAL CASES: Has this action been previously filed in this court and dismissed, remanded or closed? ☒ No ☐ Yes

If yes, list case number(s): _____

VIII(b). RELATED CASES: Have any cases been previously filed in this court that are related to the present case? ☒ No ☐ Yes

If yes, list case number(s): _____

Civil cases are deemed related if a previously filed case and the present case:

- (Check all boxes that apply) ☐ A. Arise from the same or closely related transactions, happenings, or events; or
- ☐ B. Call for determination of the same or substantially related or similar questions of law and fact; or
- ☐ C. For other reasons would entail substantial duplication of labor if heard by different judges; or
- ☐ D. Involve the same patent, trademark or copyright, and one of the factors identified above in a, b or c also is present.

IX. VENUE: (When completing the following information, use an additional sheet if necessary.)

- (a) List the County in this District; California County outside of this District; State if other than California; or Foreign Country, in which EACH named plaintiff resides.
- ☐ Check here if the government, its agencies or employees is a named plaintiff. If this box is checked, go to item (b).

County in this District:*	California County outside of this District; State, if other than California; or Foreign Country
	Wisconsin

- (b) List the County in this District; California County outside of this District; State if other than California; or Foreign Country, in which EACH named defendant resides.
- ☐ Check here if the government, its agencies or employees is a named defendant. If this box is checked, go to item (c).

County in this District:*	California County outside of this District; State, if other than California; or Foreign Country
Los Angeles	

- (c) List the County in this District; California County outside of this District; State if other than California; or Foreign Country, in which EACH claim arose.

Note: In land condemnation cases, use the location of the tract of land involved.

County in this District:*	California County outside of this District; State, if other than California; or Foreign Country
Los Angeles	

* Los Angeles, Orange, San Bernardino, Riverside, Ventura, Santa Barbara, or San Luis Obispo Counties

Note: In land condemnation cases, use the location of the tract of land involved

X. SIGNATURE OF ATTORNEY (OR PRO PER):

Date 7/12/2012

Notice to Counsel/Parties: The CV-71 (JS-44) Civil Cover Sheet and the information contained herein neither replace nor supplement the filing and service of pleadings or other papers as required by law. This form, approved by the Judicial Conference of the United States in September 1974, is required pursuant to Local Rule 3-1 is not filed but is used by the Clerk of the Court for the purpose of statistics, venue and initiating the civil docket sheet. (For more detailed instructions, see separate instructions sheet.)

Key to Statistical codes relating to Social Security Cases:

Nature of Suit Code	Abbreviation	Substantive Statement of Cause of Action
861	HIA	All claims for health insurance benefits (Medicare) under Title 18, Part A, of the Social Security Act, as amended. Also, include claims by hospitals, skilled nursing facilities, etc., for certification as providers of services under the program. (42 U.S.C. 1935FF(b))
862	BL	All claims for "Black Lung" benefits under Title 4, Part B, of the Federal Coal Mine Health and Safety Act of 1969. (30 U.S.C. 923)
863	DIWC	All claims filed by insured workers for disability insurance benefits under Title 2 of the Social Security Act, as amended; plus all claims filed for child's insurance benefits based on disability. (42 U.S.C. 405(g))
863	DIWW	All claims filed for widows or widowers insurance benefits based on disability under Title 2 of the Social Security Act, as amended. (42 U.S.C. 405(g))
864	SSID	All claims for supplemental security income payments based upon disability filed under Title 16 of the Social Security Act, as amended.
865	RSI	All claims for retirement (old age) and survivors benefits under Title 2 of the Social Security Act, as amended. (42 U.S.C. (g))