

Patent Law

Prof. Roger Ford
January 12, 2015
Class 1: Introduction

Today's agenda

- Administrative notes
- Intro to the patent system
- Mechanics and institutions of the patent system
- Architecture of the patent document

Administrative notes

Administrative notes

- Class meetings
- Canceled classes
 - Monday, January 19
 - Possibly others
- Reading assignments
- Grading
- Patent cases and technology

Intro to the patent system

Intro to the patent system

→ 35 U.S.C. § 101:

- “Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.”

Intro to the patent system

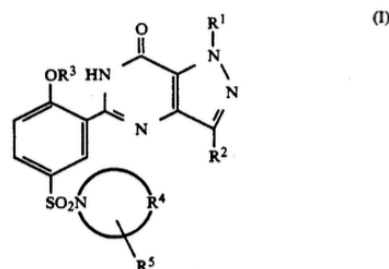
- Limited property rights
- Negative rights: right to exclude
 - Positive rights: right to sell/license
 - No positive right to practice

Sildenafil citrate

Claim 1 of U.S.
patent 5,250,534

We claim:

1. A compound of the formula:

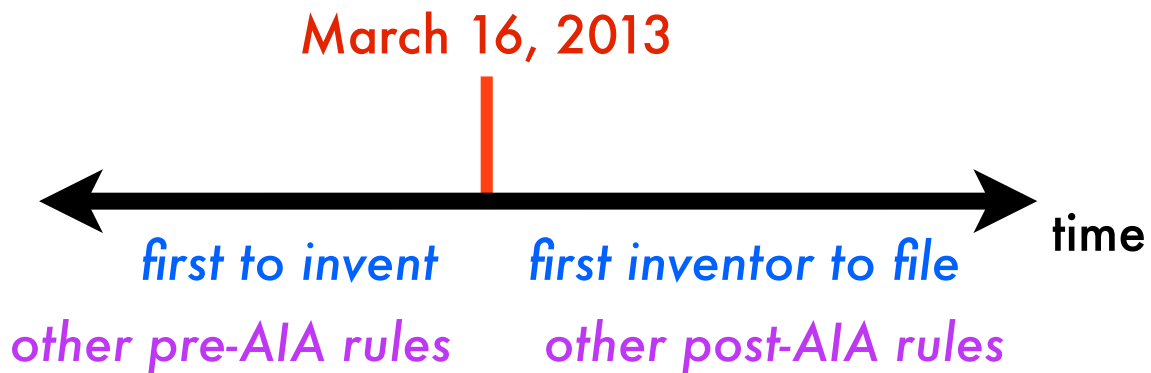


wherein

- R¹ is H, C₁-C₃ alkyl, C₃-C₅ cycloalkyl or C₁-C₃ perfluoroalkyl;
 R² is H, C₁-C₆ alkyl optionally substituted by OH, C₁-C₃ alkoxy or C₃-C₆ cycloalkyl, or C₁-C₃ perfluoroalkyl;
 R³ is C₁-C₆ alkyl, C₃-C₆ alkenyl, C₃-C₆ alkynyl, C₃-C₇ cycloalkyl, C₁-C₆ perfluoroalkyl or (C₃-C₆ cycloalkyl)C₁-C₆ alkyl;
 R⁴ taken together with the nitrogen atom to which it is attached completes a 4-N-(R⁶)-piperazinyl group;
 R⁵ is H, C₁-C₄ alkyl, C₁-C₃ alkoxy, NR⁷R⁸, or CONR⁷R⁸;
 R⁶ is H, C₁-C₆ alkyl, (C₁-C₃ alkoxy) C₂-C₆ alkyl hydroxy C₂-C₆ alkyl, (R⁷R⁸N)C₂-C₆ alkyl, (R⁷R⁸NCO)C₁-C₆ alkyl, CONR⁷R⁸, CSNR⁷R⁸ or C(NH)NR⁷R⁸;
 R⁷ and R⁸ are each independently H, C₁-C₄ alkyl, (C₁-C₃ alkoxy)C₂-C₄ alkyl or hydroxy C₂-C₄ alkyl; and

pharmaceutically acceptable salts thereof.

Intro to the patent system



Intro to the patent system

→ U.S. Constitution:

- [Congress has the power] “To promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive rights to their respective writings and inventions.”

Intro to the patent system

- Advantages of exclusivity
 - Monopoly profits → greater *ex ante* incentive to invent
 - Exclusivity → greater *ex post* incentive to develop new invention
- Advantages of the patent bargain
 - Public disclosure → knowledge can be used by others

Intro to the patent system

- Disadvantages of exclusivity
 - Monopoly pricing → goods become more expensive
 - Monopoly pricing → output falls
- Balancing the tradeoff
 - Limited patent term
 - Limited patent rights?

Patent mechanics and institutions

Patent mechanics and institutions

- Obtaining a patent
 - PTO
- Enforcing patent rights
 - Federal courts

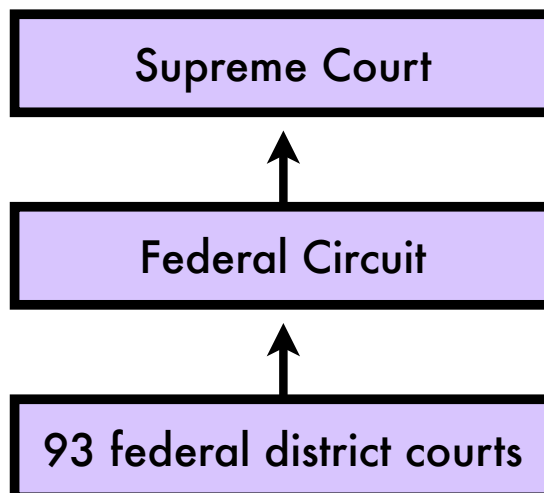
Patent mechanics and institutions

→ PTO

- Examination-based
- Negotiation creates [prosecution history](#)
- Appeals to PTAB and then Federal Circuit
- Or, you can bring a claim in federal district court

Patent mechanics and institutions

→ Courts



Patent mechanics and institutions

→ ITC

- Remedy: blocking imports of accused products

**Architecture of the
patent document**

United States Patent

[19]

Coffin, Sr.

[45]

US000205473A

[11] Patent Number: 5,205,473

[45] Date of Patent: Apr. 27, 1993

[54] RECYCLABLE CORRUGATED BEVERAGE CONTAINER AND HOLDER

[75] Inventor: David W. Coffin, Sr., Fayetteville, N.Y.

[73] Assignee: Design By Us Company, Philadelphia, Pa.

[21] Appl. No.: 854,425

[22] Filed: Mar. 19, 1992

[51] Int. Cl.³ B65D 3/28

[52] U.S. Cl. 229/441; 220/DIG. 30; 229/1.5 B; 206/813; 2; 493/296; 493/907

[58] Field of Search 229/1.5 B; 1.5 H; 4.5; 229/DIG. 2; 220/441, 671, 737-739; DIG. 30; 493/287, 296, 907, 908; 209/8, 47, 215; 206/813

[56] References Cited

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OTHER PUBLICATIONS

"The Wiley Encyclopedia of Packaging Technology", John Wiley & Sons, pp. 66-69, 1996.

Primary Examiner—Gary E. Elkins

Attorney, Agent, or Firm—Symonivodi & Lechner

ABSTRACT

Corrugated beverage containers and holders are which employ recyclable materials, but provide flating structures for containing insulating air. These products are easy to hold and have a lesser impact on the environment than polystyrene containers.

18 Claims, 8 Drawing Sheets

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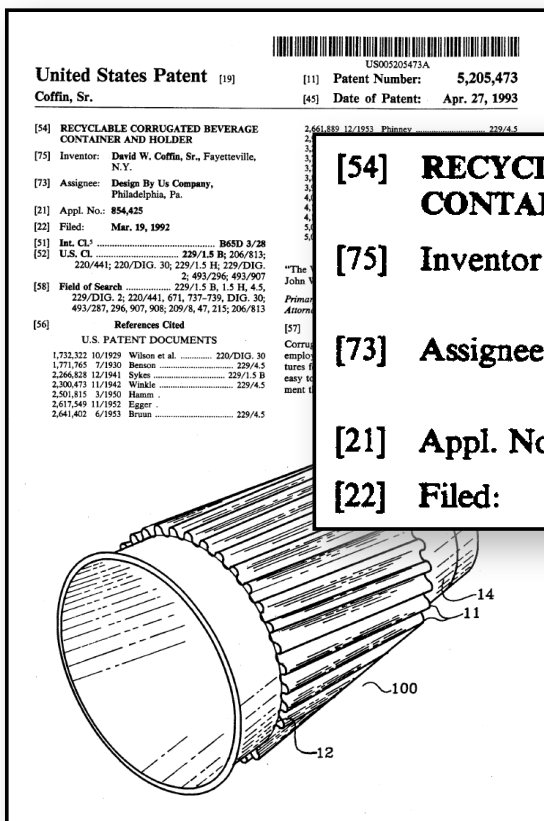
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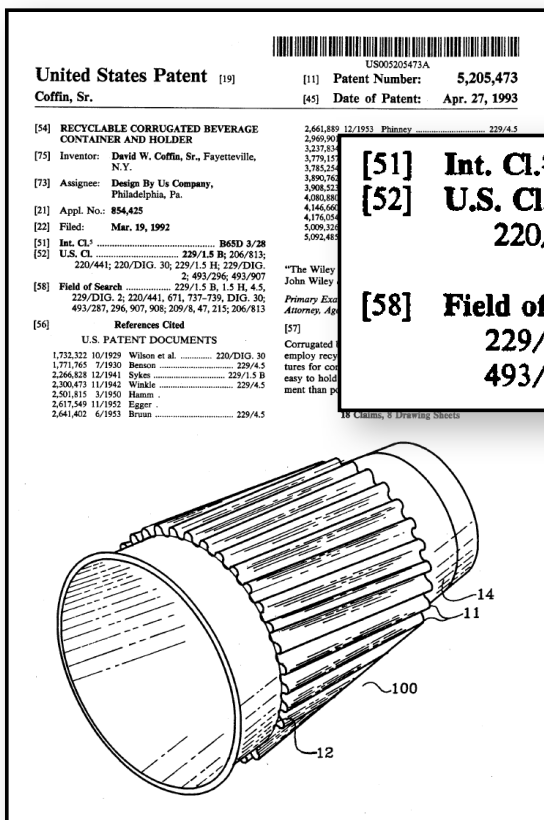
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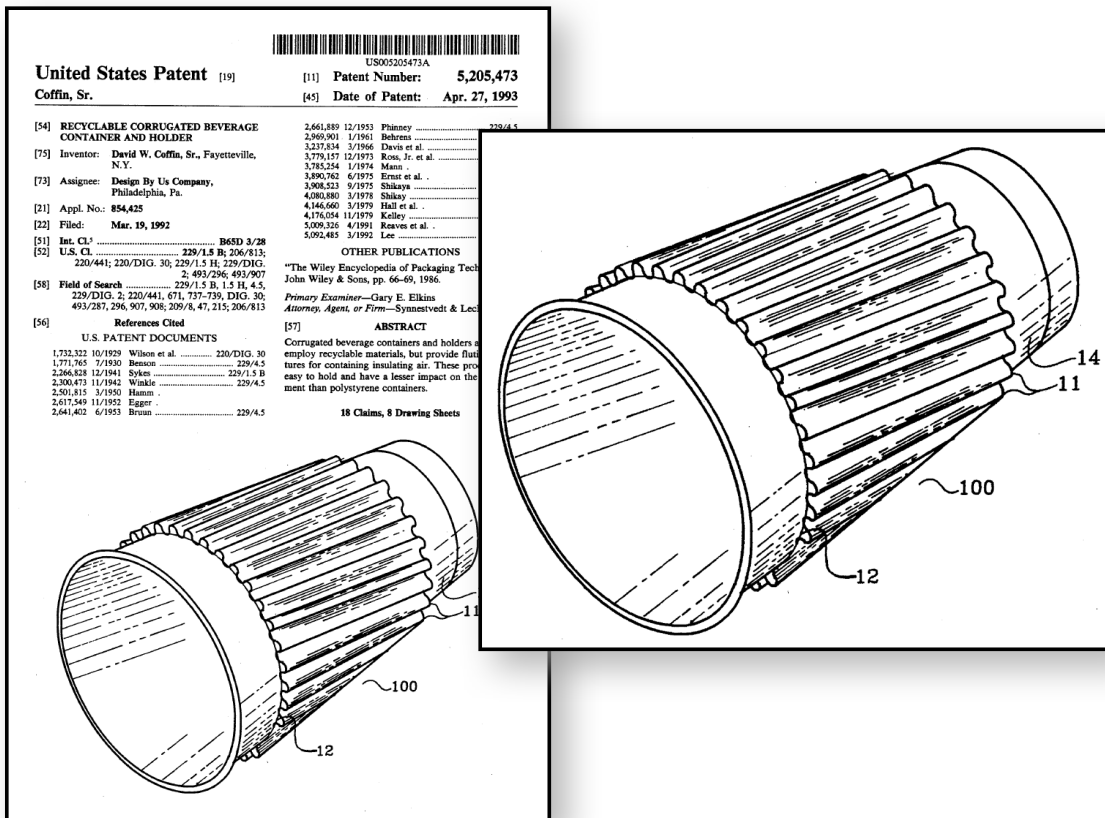
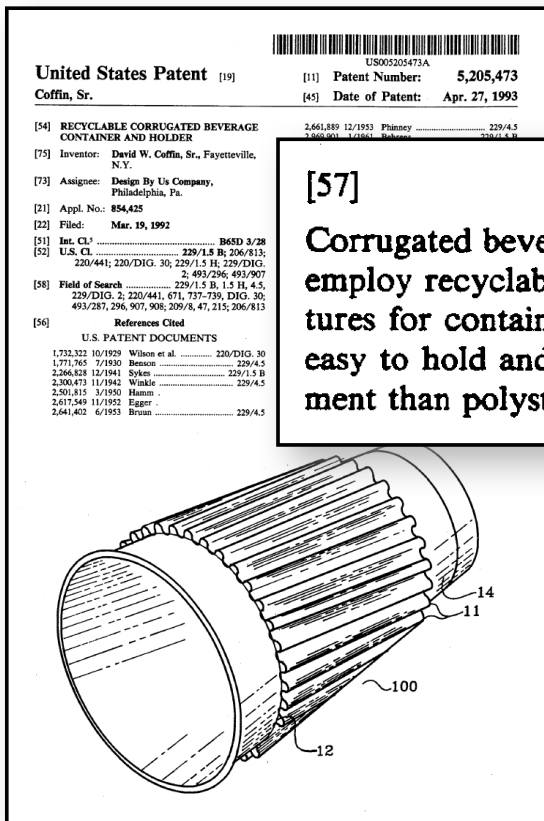
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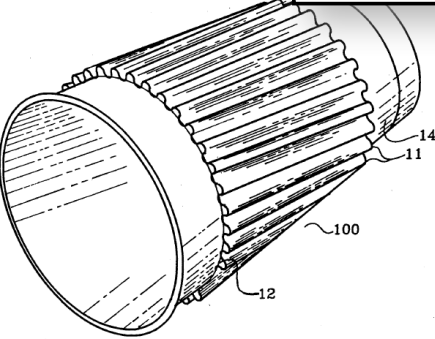
Date of Patent:

Apr. 27, 1993

RECYCLABLE CORRUGATED BEVERAGE CONTAINER AND HOLDER

FIELD OF THE INVENTION

This invention relates to insulating containers, and especially those which are recyclable and made of cellulosic materials.



United States Patent

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Patent Number:

5,205,473

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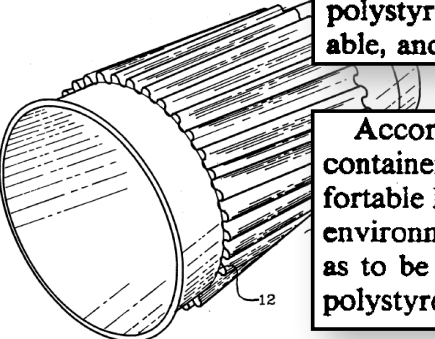
RECYCLABLE CORRUGATED BEVERAGE CONTAINER AND HOLDER

BACKGROUND OF THE INVENTION

Hot beverage containers have traditionally been constructed of two materials: wax-coated paper and polystyrene. Although both products have received wide spread implementation by fast food restaurants and consumers, they each have their own specialized drawbacks which have yet to be overcome.

Polystyrene is an excellent insulator, and because of its unique moldability, can be formed into a myriad of different shapes and sizes. Unfortunately, however, polystyrene is neither easily recyclable nor biodegradable, and must be disposed in a sanitary landfill.

Accordingly, there is a need for a food and beverage container which provides adequate insulation for comfortable handling, but which is generally friendly to the environment. Such a container must be inexpensive, so as to be a cost effective substitute for either paper or polystyrene alternatives.



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[57] ABSTRACT

Corrugated beverage containers and holders are which employ recyclable materials, but provide fluting structures for containing insulating air. These products are easy to hold and have a lesser impact on the environment than polystyrene containers.

18 Claims, 8 Drawing Sheets

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SUMMARY OF THE INVENTION

This invention provides recyclable, corrugated containers and container holders which can be made from existing cellulosic materials, such as paper. The preferred recyclable, corrugated hot beverage container includes a lip and an internal cavity for containing a hot or cold medium. The container includes fluting means, such as fluting adhesively attached to one or more liners, for thermally spacing the hands of the user from the harsh temperatures of the contents of the container.

In the preferred holders of this invention, a corrugated tubular member is provided having at least a first opening for receiving and retaining a cup, or the like. The tubular member's corrugation, like that for the container above, includes fluting means for providing insulating air pockets. The holder can also be fashioned to be collapsible about two or more pivot points for flat storage.

Accordingly, the deficiencies of both paper and polystyrene are overcome at a minimum expense. The containers of this invention can be used for comfortably holding a variety of beverages, such as hot chocolate, soup, or coffee. The provided holders can be used in conjunction with paper cups, aluminum cans, or other beverage containers, without the discomfort associated with condensation and extreme temperatures.

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BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying drawings illustrate preferred embodiments of the invention according to the practical application of the principles thereof, and in which:

FIG. 1: is a top planar view of a preferred beverage container holder of this invention;

FIG. 2: is a bottom planar view of the preferred beverage container holder of FIG. 1;

FIG. 3: is a perspective view of the preferred beverage container holder of FIG. 1 disposed around a paper cup;

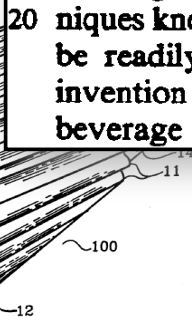
FIG. 4: is a top view of the preferred beverage container holder of FIG. 1 in a collapsed and flattened condition;

[57] Corrugated beverage
employ recyclable ma-
terials for containing in-
easy to hold and have
ment than polystyrene



With reference to FIGS. 1-5, there is shown, in multiple views, a preferred beverage container holder 100 of this invention. The preferred holder 100 includes a tubular structure having an inner liner 12 and sinuous fluting 11 disposed around the periphery of the liner 12.

emp
tures
easy
ment



Next time

→ Claim drafting