

DRAFTING

Dr. Chitra Arvind

Rajeshwari and Associates

The tyre tale

PATENT

- Patent granted for use of 2 tyres at a wheel
- Claim: two tyres adjacent to each other
- Infringer:
 - two tyres at one wheel
 - gap between two tyres
 - does it infringe ?

The tyre tale

PATENT

- Court: No infringement – claim limited to 2 “adjacent” tyres.
- Even drawings confined to 2 adjacent tyres
- Infringer goes scot free !!!

Infringement ?!

Patented Epilady

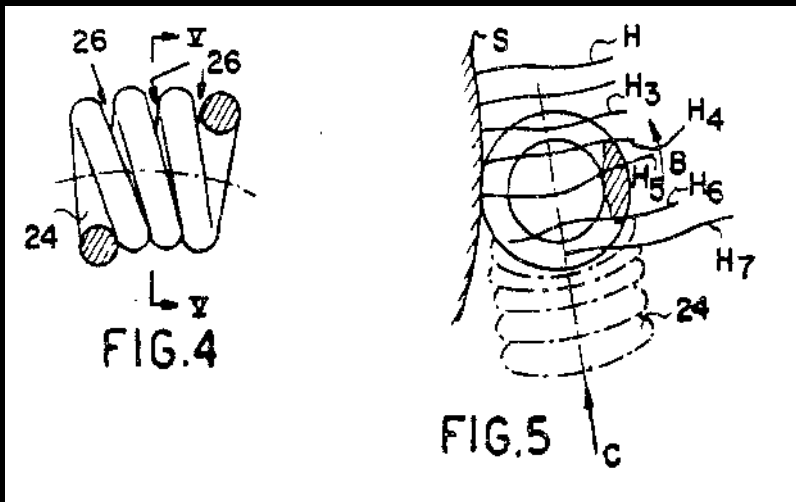


Remington Smooth & Silky

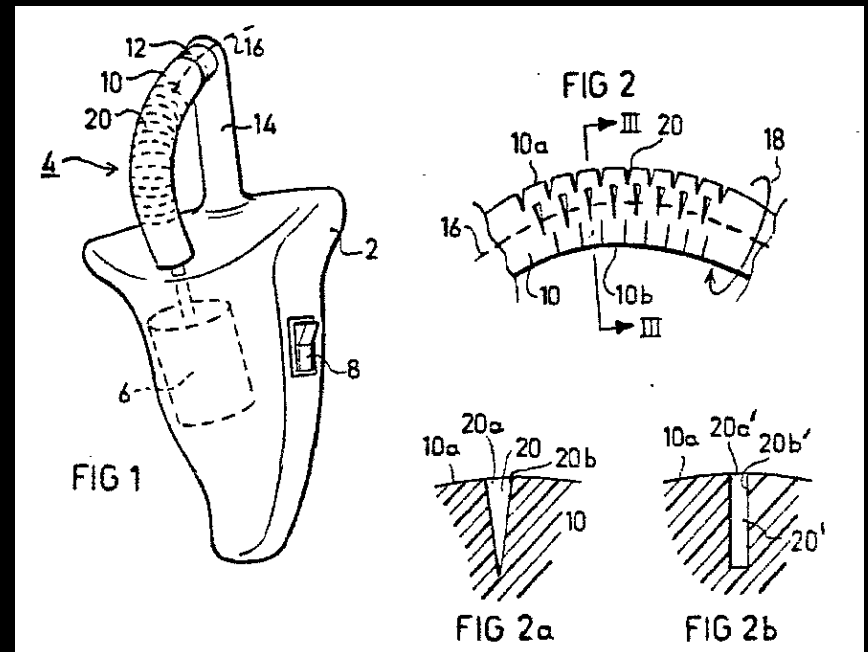


Comparison of depilatory devices

Epilady- helical spring



Remington- rubber rod with slits



Epilady Patent EP 0 101 656

An electrically powered depilatory device comprising:
a hand held portable housing;
motor means disposed in said housing;
and a **helical spring** comprising a plurality of adjacent **windings** arranged to be driven by said motor means in rotational sliding motion relative to skin bearing hair to be removed, said **helical spring** including an accurate hair engaging portion arranged to define a convex side whereat the **windings** are spread apart, and a concave side corresponding thereto whereat the **windings** are pressed together,

Epilady Patent EP 0 101 656 (2)

the rotational motion of the **helical spring** producing continuous motion of the **windings** from a spread apart orientation at the convex side to a pressed together orientation at the concave side and for engagement and plucking of hair from the skin of the subject, whereby the surface velocities of the **windings** relative to the skin greatly exceeds the surface velocity of the housing relative thereto.

The Smooth & Silky Patent

A depilatory device for removing body hair, comprising: a manually-grippable housing and a **flexible hair-plucker body of cylindrical contour** mounted for rotation about its longitudinal axis to said housing; said hairplucker body being supported with its longitudinal axis disposed arcuately and having an exposed section formed with a **plurality of gaps** in its **outer surface** which during rotation of said hairplucking body and its movement over a surface from which hair is to be removed, are open at the convex side of said section **to receive the hairs in the gaps** and are closed at the concave side to catch, pluck-out and then eject the hairs;

The Smooth & Silky Patent

characterized in that

said **hair-plucker body** is a cylindrical member of plastic material

having a smooth outer surface;

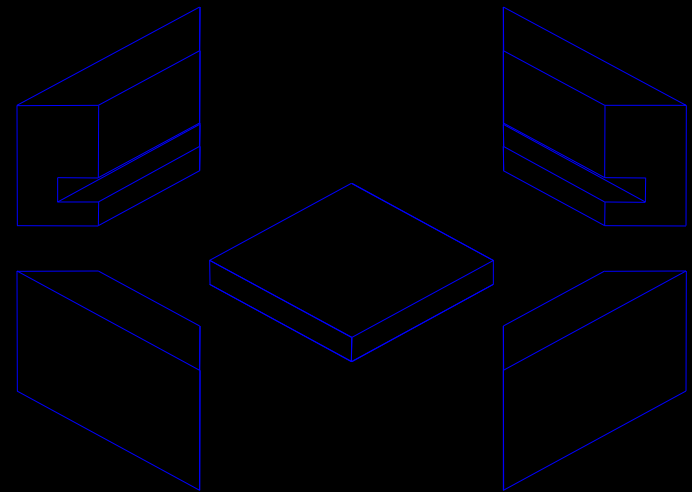
and that said **gaps are defined by a plurality of slits**

each penetrating only partially through, and extending circumferentially of, the hair-plucker body.

So how to draft a claim?

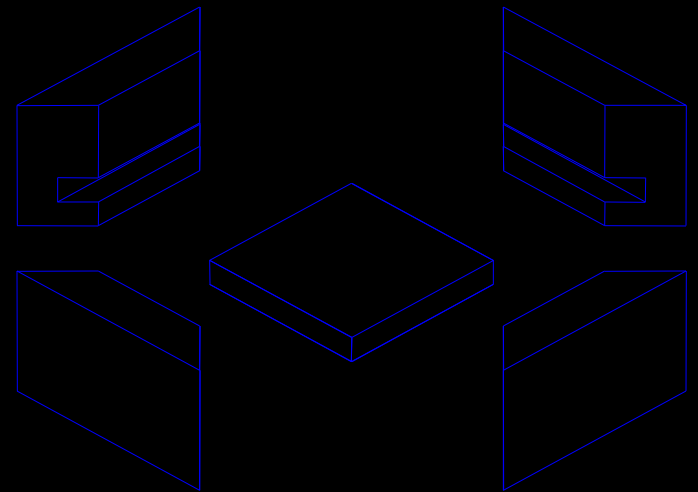
Claiming Your Stake: A More Detailed Example

- Imagine that you have just invented the world's first 4-sided box.
- How will you protect this brilliant invention?



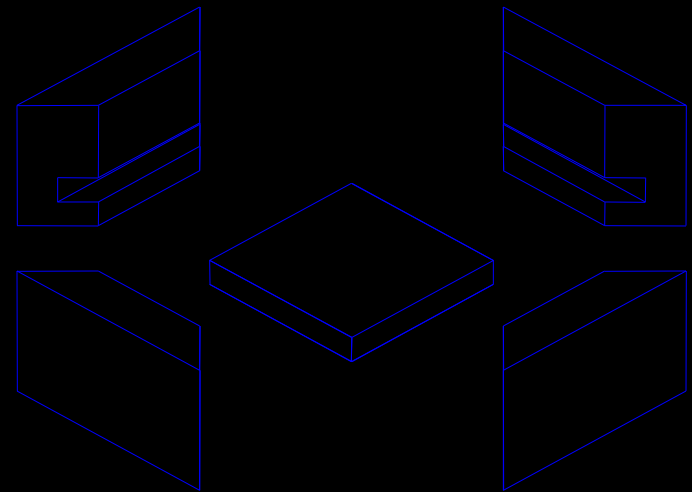
Levels of Abstraction

- A vessel for holding things.
- A box having a base and 4 walls.
- A wooden box having a base and 4 grooved and mitred walls.



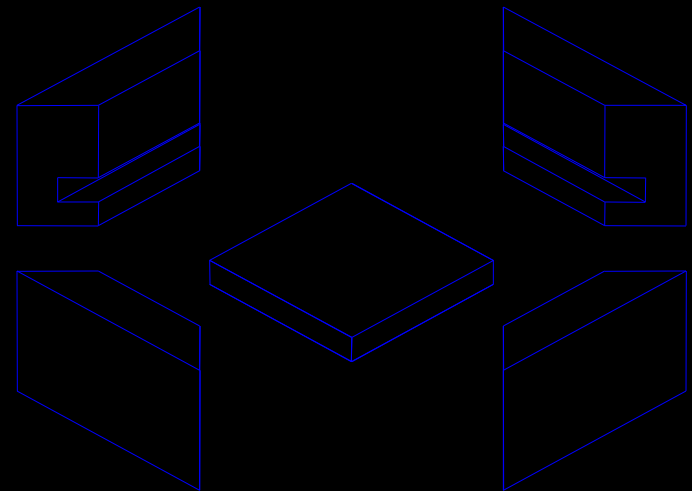
Naming the Elements

- A base.
- A number of walls.
 - Is 4 the right number of walls?
- Means for joining the walls to the base, unless such joining is inherent in the structure of the base or the walls.



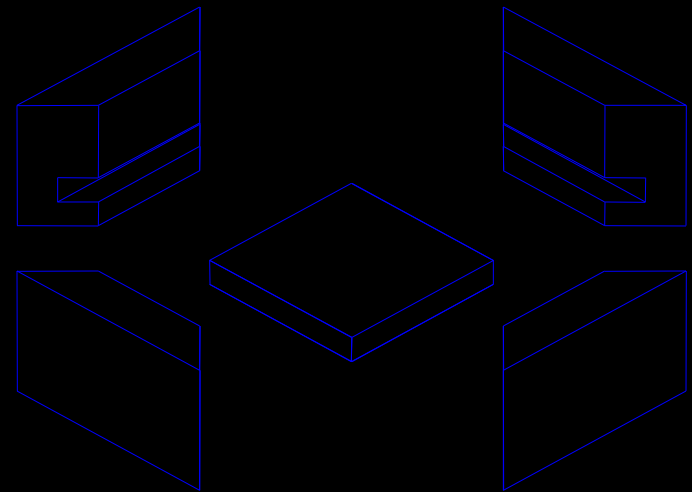
Limiting the Elements

- Explicit Limitations
 - Physical characteristics
 - shape
 - flexibility
 - temperature
 - Chemical characteristics
 - substance
 - state
- Implicit Limitations
 - A square has 4 sides



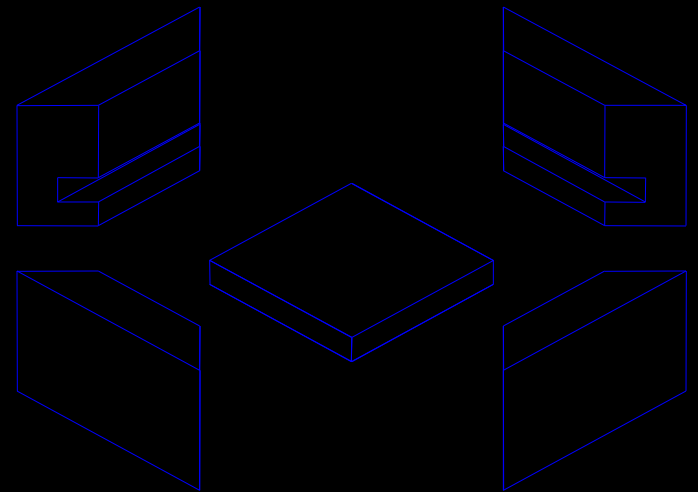
Limiting the Base

- A base
- A planar base
- A planar base with 4 edges
- A rectangular base
- A square base
- A rigid square base
- A rigid square prismical base
- A rigid wooden square prismical base



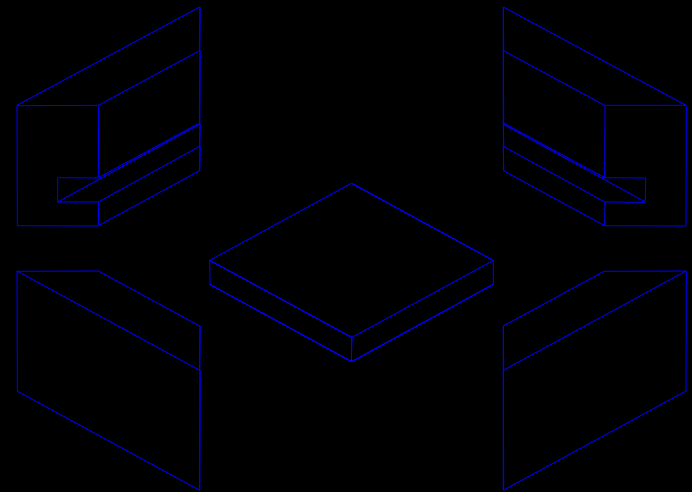
Limiting Each Wall

- A wall.
- A 4-sided prism.
- A trapezoidal prism.
- A bilaterally symmetrical trapezoidal prism.



Limiting The Joining Means Explicit Structural Limitation

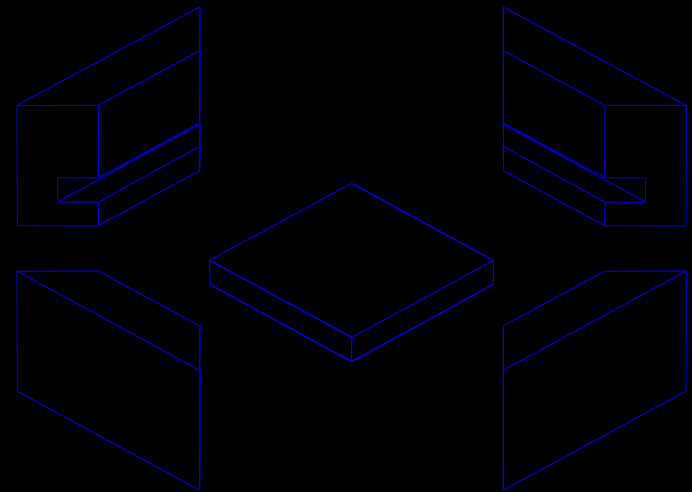
- An angle bracket having a first arm and a second arm that define between them a 90 degree angle,
 - the first arm adapted to engage the first wall, and
 - the second arm adapted to engage the base,
 - such that the angle bracket is operable to retain the base and the first wall in abutting perpendicular disposition.



Limiting The Joining Means

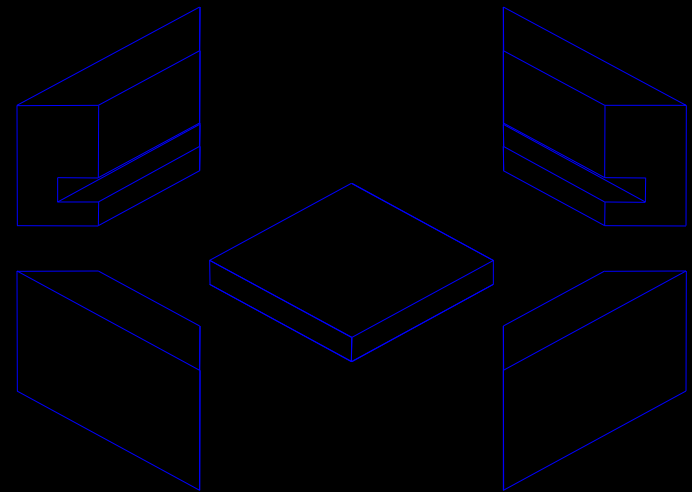
Explicit Means Limitation

- Means for joining the first wall to the first edge of the base, such that the first wall and the base are retained in perpendicular disposition.
- “Means” is interpreted according to the invention description in the patent.



Limiting The Joining Means Implicit in the Wall Limitation

- A bilaterally symmetrical trapezoidally prismical wall *defining an elongated channel breaching the prism's minor parallel face, the channel being adapted to receive and retain a portion of the first edge of the base* and to thereby retain the base in perpendicular disposition to the prism's minor parallel face.



Relationships

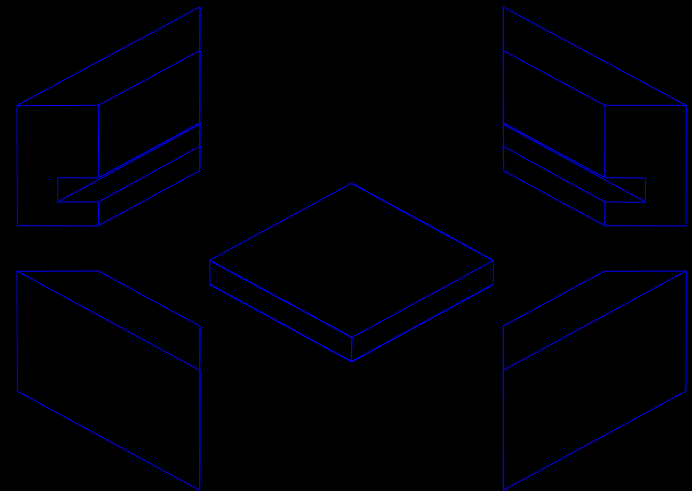
Some Basic Concepts

- Relationships help to indicate that you have invented a patentable combination, not an unpatentable aggregation.
- Relationships make claims easier to understand.
- Concrete, structural relationships are less vulnerable to attack or misinterpretation.
- Relationships should not refer to external point of reference.

Relationships

The Box Example

- Means for joining the first wall to the base, *such that the first wall and the base are abuttingly and perpendicularly disposed.*
- A bilaterally symmetrical trapezoidally prismical wall, defining an elongated channel breaching the prism's minor parallel face, the channel being adapted to receive and retain a portion of the first edge of the base, *and to thereby retain the base in perpendicular disposition to the prism's minor parallel face.*



Function

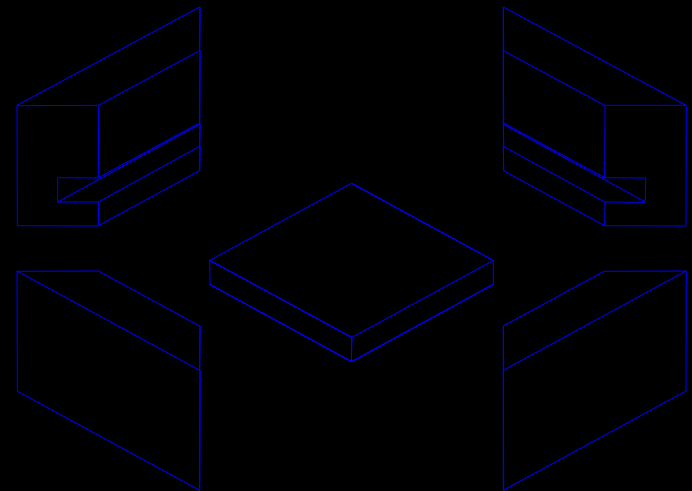
Some Basic Concepts

- Function makes your claims easier to understand.
- State the purpose of the invention or an element.
- Explain the invention's or an element's structure.
- Function must be supported by the structure you ascribe to the elements and relationships.
- You can't claim results. Your claim will fail if you vaguely describe element or relationship structure, relying on function in place of structure.

Function

The Box Example

- A vessel for enclosing objects, comprising:
 - a substantially planar base;
 - four prismical walls; and
 - means for joining each wall to an edge of the base, such that each wall is perpendicularly disposed to the base and the four walls together form a perimeter circumscribing the base, *whereby the four walls and the base define an enclosure.*



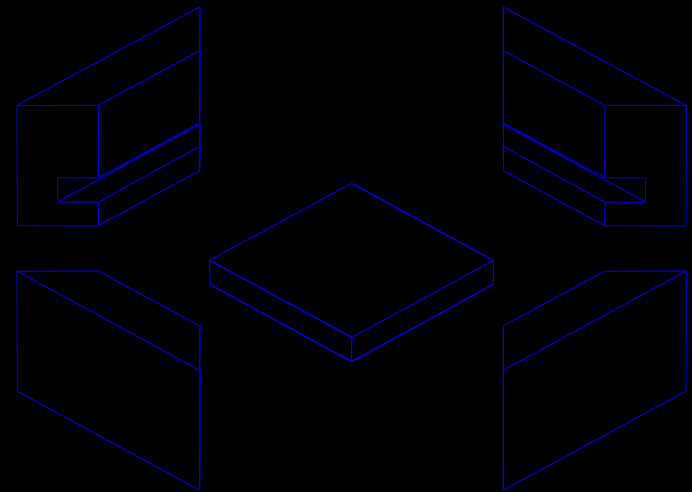
How will you cut your cake?





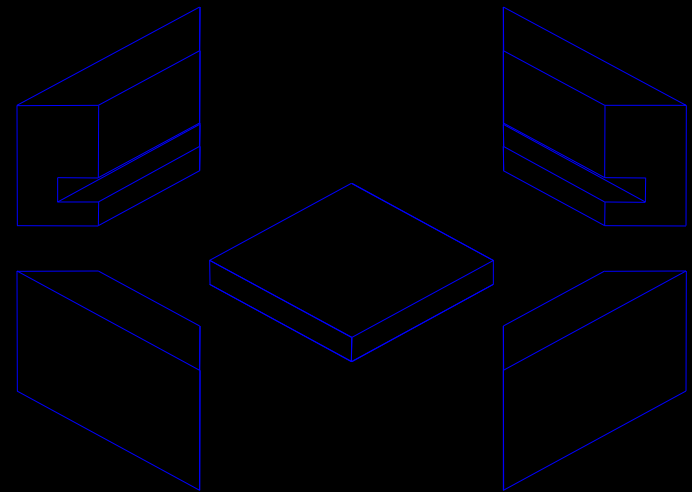
A Workshop Problem

- Assume that the state of the art is the 4-sided box.
- Would the following products infringe a patent claim for the 4-sided box?
- Would the following inventions support valid patent claims in view of the 4-sided box?



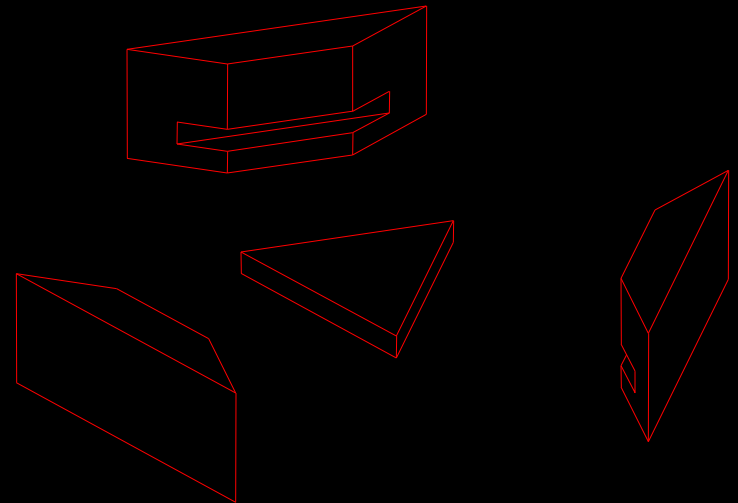
The Claim

- A vessel for enclosing objects, comprising:
 - a substantially planar base,
 - four prismatic walls, and
 - means for joining each wall to an edge of the base, such that each wall is perpendicularly disposed to the base, and the four walls and the base define an enclosure.



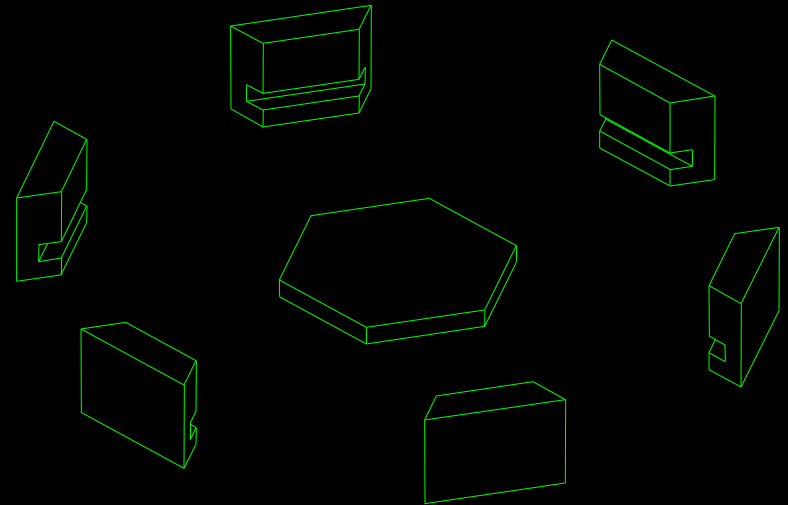
The 3-sided Box

- Facts to consider:
 - The 3-sided box uses less material than the 4-sided box.
 - The 3-sided box is smaller than the 4-sided box.
 - Triangles are the most stable shape; their structure resists deformation.



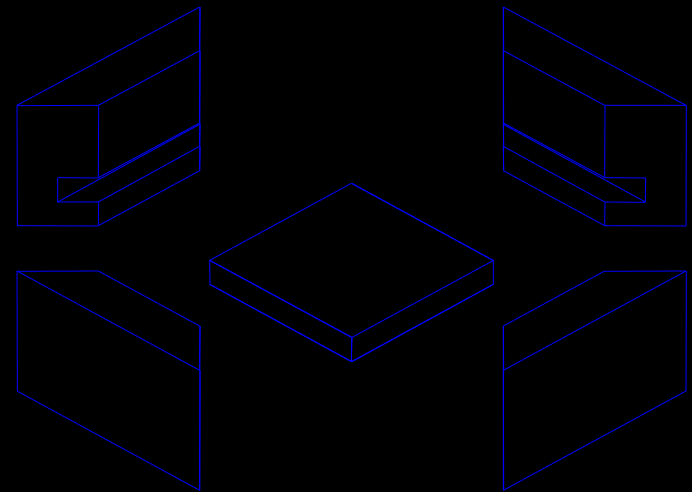
The 6-sided Box

- Facts to consider:
 - Artists consider the 6-sided box more attractive than the 4-sided box.
 - Your company's trademark is a hexagon.
 - Honeycombs are the most efficient subdivision of area.



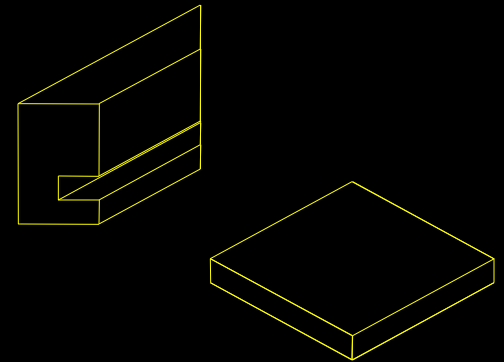
The Claim

- A vessel for enclosing objects, comprising:
 - a substantially planar base,
 - four prismatic walls, and
 - means for joining each wall to an edge of the base, such that each wall is perpendicularly disposed to the base, and the four walls and the base define an enclosure.



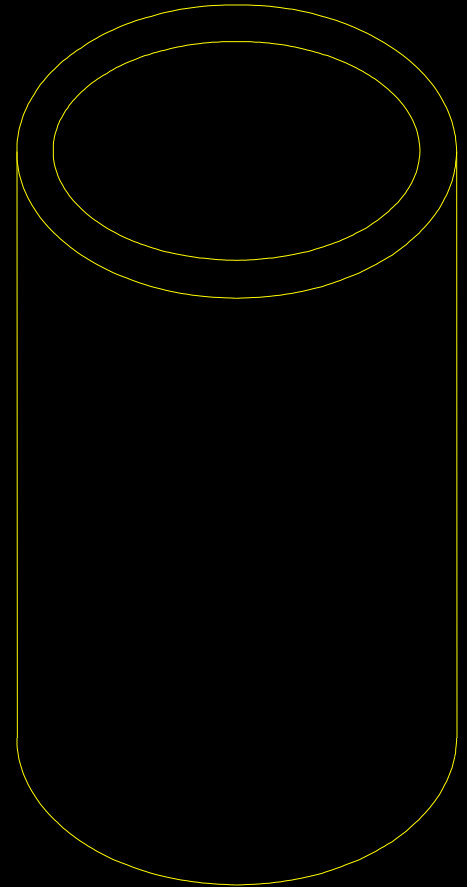
The 1-sided Box

- A claim to a 1-sided box would give you wonderfully broad protection, extending to boxes with an arbitrary number of sides;
- *however*, because a 1-sided box doesn't seem to work, it can't support a patent claim.



The 1-sided Box?

- How many sides does this box have?
- Are sides the best way to describe this box or do we need to shift abstraction levels?



TIPS

Chemical Invention

- Substance per se -broad coverage
- Process:
 - a) Starting materials
 - b) Steps of the process
 - c) Various parameters involved in each step, and
 - d) End product.

TIPS

Chemical Patents

- Proportions: Provide a broad workable range unless an exact amount is crucial and essential to the success of the invention

TIPS

Chemical Patents

- Specify the class and specific chemicals used

Ex: All the oxidants that would enable the invention, all alkali/acids that would help to work the invention

TIPS

- **Apparatus or device invention**
- The various parts/means of the device.
- The interconnections involved between the various means.
- How the various means are functioning

EXAMPLES

Composition:

- A synergistic composition useful in the treatment of malaria, said composition comprising extracts of:
 - Eucalyptus sp. 6 to 10 parts by wt.
 - curcuma longa 5 to 12 parts by wt.
 - and conventional additives and carriers.

USE OF NEW SUBSTANCE

- A novel compound X useful for treatment of cancer
- Use of compound X for treating cancer
- Use of compound X to prepare a medicament Y for treating cancer
- Use of compound X to manufacture medicament Y for management of cancer

US PATENT NO. 6,884,421

- A pharmaceutical composition for treating hyperglycemic condition, said composition comprising a pharmaceutically effective amount of:
 - Butyric acid
 - An insoluble wheat bran fibre; and
 - Guar gum fibre as a soluble hypoglycemic agent

US PATENT NO. 6,616,950

- What is claimed is:
 1. A fermented fruit based herbal health drink composition useful as an antioxidant, cardio-tonic, diuretic, digestive, choleric, nervine relaxant and immuno-modulant, comprising extract from plant *Andrographis* with concentration ranging between 0.5 to 10% in the total herbal health drink, extract from fruit, and ethanol ranging between 3 to 13% in the total herbal health drink, optionally extract from plant *Tinospora* and other additives.

Try it out !

Hair-drier: prior art



Hair-drier: invention



Tea-pot – break into 4

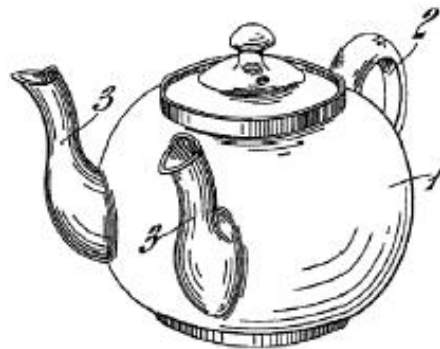
Tea pot 1



Tea pot 2



Tea pot 3



Tea pot of the
inventor

Fig.1.

Tea-pot

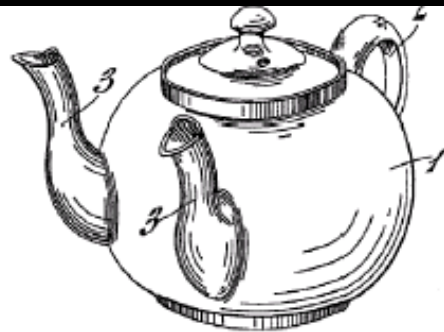
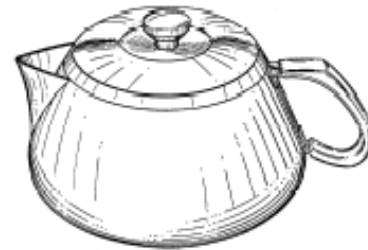
Tea pot 1



Tea pot 2



Tea pot 3



Tea pot of the
inventor

Fig. 1.

Questions?

