

Patent Law

Prof. Roger Ford
January 25, 2016
Class 2: A (Very Brief)
Introduction to Claim Drafting

Today's agenda

- Recap
- Mechanics and formalities of patent claims
- Claim strategy
- Claim-drafting exercise

Recap

Recap

- What patents are, and the purpose of the patent system
- Mechanics and institutions of the patent system
- Architecture of the patent document

Mechanics and formalities of claims

We claim:

1. A method of placing an order for an item comprising:
 - under control of a client system,
 - displaying information identifying the item; and
 - in response to only a single action being performed,
 - sending a request to order the item along with an identifier of a purchaser of the item to a server system;
 - under control of a single-action ordering component of the server system,
 - receiving the request;
 - retrieving additional information previously stored for the purchaser identified by the identifier in the received request; and
 - generating an order to purchase the requested item for the purchaser identified by the identifier in the received request using the retrieved additional information; and
 - fulfilling the generated order to complete purchase of the item
- whereby the item is ordered without using a shopping cart ordering model.

We claim:

1. **A method of placing an order for an item** comprising:
under control of a client system,
displaying information identifying the item; and
in response to only a single action being performed,
sending a request to order the item along with an
identifier of a purchaser of the item to a server
system;
under control of a single-action ordering component of
the server system,
receiving the request;
retrieving additional information previously stored for
the purchaser identified by the identifier in the
received request; and
generating an order to purchase the requested item for the
purchaser identified by the identifier in the received
request using the retrieved additional information; and
fulfilling the generated order to complete purchase of the
item
whereby the item is ordered without using a shopping cart
ordering model.

Preamble

We claim:

1. **A method of placing an order for an item** comprising:
under control of a client system,
displaying information identifying the item; and
in response to only a single action being performed,
sending a request to order the item along with an
identifier of a purchaser of the item to a server
system;
under control of a single-action ordering component of
the server system,
receiving the request;
retrieving additional information previously stored for
the purchaser identified by the identifier in the
received request; and
generating an order to purchase the requested item for the
purchaser identified by the identifier in the received
request using the retrieved additional information; and
fulfilling the generated order to complete purchase of the
item
whereby the item is ordered without using a shopping cart
ordering model.

Preamble
Transition

We claim:

1. A method of placing an order for an item comprising:

under control of a client system,
displaying information identifying the item; and
in response to only a single action being performed,
sending a request to order the item along with an
identifier of a purchaser of the item to a server
system;
under control of a single-action ordering component of
the server system,
receiving the request;
retrieving additional information previously stored for
the purchaser identified by the identifier in the
received request; and
generating an order to purchase the requested item for the
purchaser identified by the identifier in the received
request using the retrieved additional information; and
fulfilling the generated order to complete purchase of the
item
whereby the item is ordered without using a shopping cart
ordering model.

Preamble

Transition

Body

We claim:

1. A method of placing an order for an item comprising:

under control of a client system,
displaying information identifying the item; and
in response to only a single action being performed,
sending a request to order the item along with an
identifier of a purchaser of the item to a server
system:

un 2. The method of claim 1 wherein the displaying of
information includes displaying information indicating the
single action.

3. The method of claim 1 wherein the single action is
clicking a button.

ge 4. The method of claim 1 wherein the single action is
speaking of a sound.

5. The method of claim 1 wherein a user of the client
system does not need to explicitly identify themselves when
placing an order.

fulfilling the generated order to complete purchase of the
item

whereby the item is ordered without using a shopping cart
ordering model.

Preamble

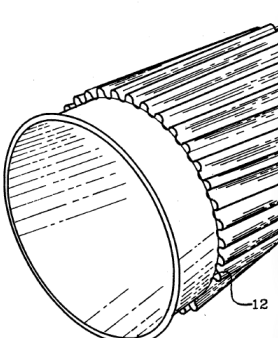
Transition

Body

Dependent
claims

United States Patent [19]		[11] Pat
Coffin, Sr.		[45] Dat
[54] RECYCLABLE CORRUGATED BEVERAGE CONTAINER AND HOLDER	2,661,889 12	
[75] Inventor: David W. Coffin, Sr., Fayetteville, N.Y.	2,969,891 12	
	3,237,834 12	
	3,779,157 12	
	3,782,254 12	
[73] Assignee: Design By Us Company, Philadelphia, Pa.	3,890,762 12	
	3,908,253 12	
	4,080,880 12	
[21] Appl. No.: 854,425	4,146,660 12	
[22] Filed: Mar. 19, 1992	4,176,054 12	
	5,009,326 12	
	5,092,485 12	
[51] Int. Cl. ³ B65D 3/28		
[52] U.S. Cl. 229/1.5 B; 206/813; 220/441; 220/DIG. 30; 229/1.5 H; 229/DIG. 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		
U.S. PATENT DOCUMENTS		
1,733,322 10/1959 Wilson et al. 220/DIG. 30		
1,771,765 5/1930 Benson 229/4.5		
2,266,828 12/1941 Sykes 229/1.5 B		
2,300,473 11/1942 Winkle 229/4.5		
2,502,815 3/1950 Hamm		
2,617,549 11/1952 Sager		
2,641,402 6/1953 Braun 229/4.5		

18 Claims, 8 Drawing Sheets



1. A recyclable, insulating beverage container holder, comprising a corrugated tubular member comprising cellulosic material and at least a first opening therein for receiving and retaining a beverage container, said corrugated tubular member comprising fluting means for containing insulating air; said fluting means comprising

fluting adhesively attached to a liner with a recyclable adhesive.

4. The holder of claim 1, wherein said tubular member comprises at least two pivot axes for permitting said tubular member to fold into a flattened condition.

5. The holder of claim 1, wherein a surface of said liner is coated with a water-resisting agent.

6. The holder of claim 1, wherein said fluting comprises sinuous fluting.

8. A recyclable collapsible beverage container holder comprising a corrugated tube

Mechanics and formalities of claims

→ Discussion questions:

- Why have multiple claims?
- When are broad claims helpful?
- When are narrow claims helpful?

Mechanics and formalities of claims

→ Preamble

- Identifies kind of invention
- Usually not read to limit claim scope, but can be, so don't be too clever

Mechanics and formalities of claims

→ Transition

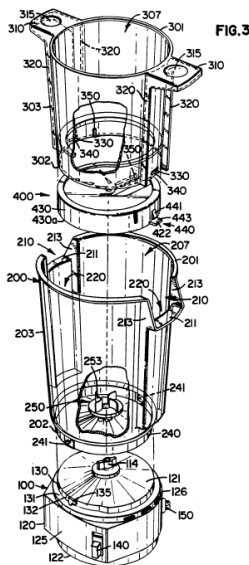
- "Comprising": must include at least the listed elements
- "Consisting of": must contain only the listed elements
- "Consisting essentially of": must contain only the listed elements and others that do not substantially change the invention

Mechanics and formalities of claims

→ Body

- List of elements
- Explanation of how the elements relate
- Single sentence
- Clear internal references

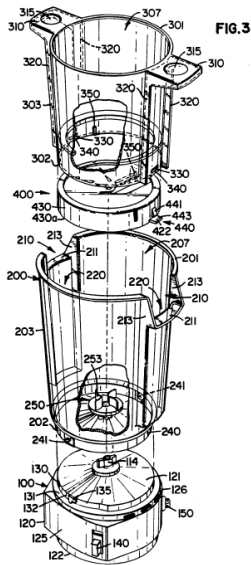
US patent 5,089,286



I claim:

1. A vegetable cutter, comprising:
a frame having an open end and defining a retention compartment,
a container defining a retention chamber which is configured for reception within the retention compartment,
a means for rotating a vegetable retained within the retention compartment,
a blade assembly operably coupled to the container for slicing a vegetable retained within the retention compartment as the vegetable is rotated by the rotating means,
wherein the sliced vegetable passes into the retention chamber defined by the container.

US patent 5,089,286



I claim:

1. A vegetable cutter, comprising:

a frame having an open end and defining a retention compartment,

a container defining a retention chamber which is configured for reception within the retention compartment,

a means for rotating a vegetable retained within the retention compartment,

a blade assembly operably coupled to the container for slicing a vegetable retained within the retention compartment as the vegetable is rotated by the rotating means,

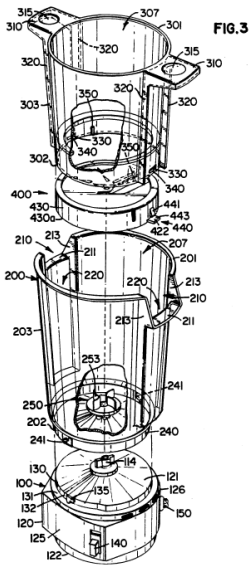
wherein the sliced vegetable passes into the retention chamber defined by the container.

Mechanics and formalities of claims

→ All-Elements Rule:

- To infringe, the defendant's product or process must include every element of a single patent claim, either literally or through the doctrine of equivalents

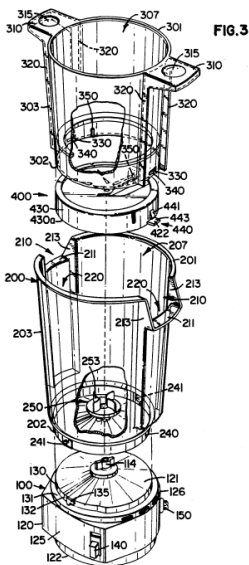
US patent 5,089,286



I claim:

1. A vegetable cutter, comprising:
 - a frame having an open end and defining a retention compartment,
 - a container defining a retention chamber which is configured for reception within the retention compartment,
 - a means for rotating a vegetable retained within the retention compartment,
 - a blade assembly operably coupled to the container for slicing a vegetable retained within the retention compartment as the vegetable is rotated by the rotating means,wherein the sliced vegetable passes into the retention chamber defined by the container.

US patent 5,089,286



I claim:

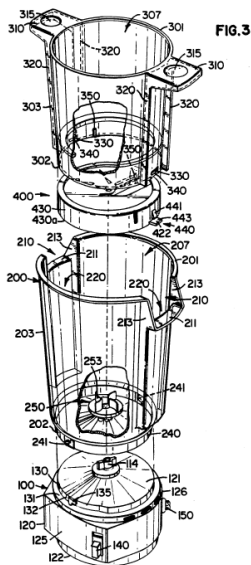
1. A vegetable cutter, comprising:
 - a frame having an open end and defining a retention compartment,
 - a container defining a retention chamber which is configured for reception within the retention compartment,
 - a means for rotating a vegetable retained within the retention compartment,
 - a blade assembly operably coupled to the container for slicing a vegetable retained within the retention compartment as the vegetable is rotated by the rotating means,wherein the sliced vegetable passes into the retention chamber defined by the container.

Mechanics and formalities of claims

→ Means-plus-function claims –
35 U.S.C. § 112(f):

“An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.”

US patent 5,089,286



I claim:

1. A vegetable cutter, comprising:
 - a frame having an open end and defining a retention compartment,
 - a container defining a retention chamber which is configured for reception within the retention compartment,
 - a means for rotating a vegetable retained within the retention compartment,
 - a blade assembly operably coupled to the container for slicing a vegetable retained within the retention compartment as the vegetable is rotated by the rotating means,wherein the sliced vegetable passes into the retention chamber defined by the container.

Means Plus Function Claiming:
Percent of Patent Applications with "Means For" in Claimset



Mechanics and formalities of claims

→ *Jepson* claims – 35 C.F.R. § 1.75(e):

Where the nature of the case admits, as in the case of an [improvement](#), any independent claim should contain in the following order:

- (1) A preamble comprising a [general description of all the elements or steps](#) of the claimed combination which are [conventional or known](#),
- (2) A phrase such as “wherein the [improvement comprises](#),” and
- (3) Those elements, steps, and/or relationships which constitute that portion of the claimed combination which the applicant considers as the [new or improved portion](#).

US patent 4,892,244

6. In a staple cartridge insertable within a surgical stapler and containing staples and comprising an elongated body including one or more longitudinal slots for slidably receiving one or more longitudinal pusher bars comprising a firing mechanism of said surgical stapler, and a plurality of drivers engageable by said pusher bars for ejecting the staples from the cartridge, said staple cartridge releasably fastened to a said surgical stapler, **the improvement comprising** a lockout mechanism connected to said longitudinal slots for preventing said pusher bars from passing more than one time through said longitudinal slots.

“No patent attorney in their right mind would follow this suggestion. There is no absolute mandate that patent claims to an improvement describe what is known or convention in the preamble. Likewise, there is no absolute mandate that the transition phrase used mentions that the body of the claim relates to an improvement.”

–Gene Quinn

Mechanics and formalities of claims

→ Negative limitations

- “A windmill according to claim 1, wherein the wind-catching device is a set of blades made of any rigid material except wood.”

Claim strategy

Claim strategy

→ Discussion question:

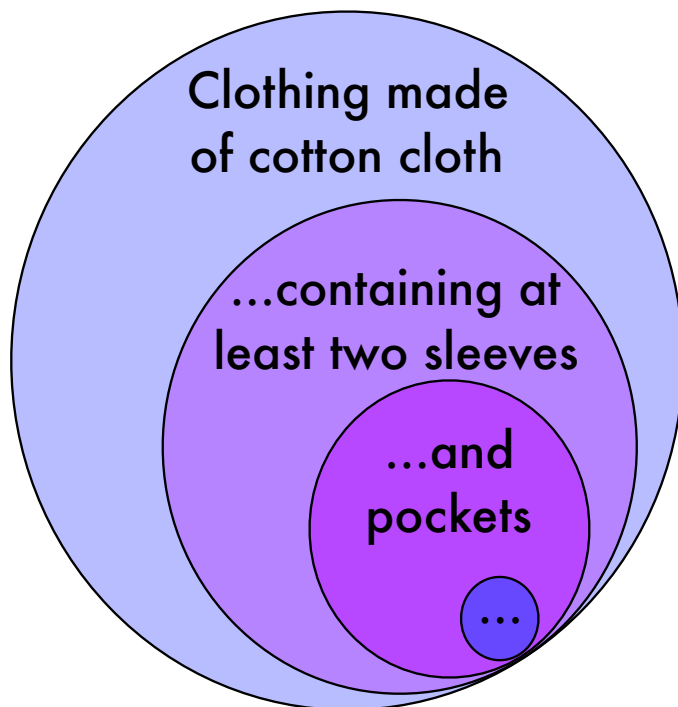
- What are your goals in drafting claims?

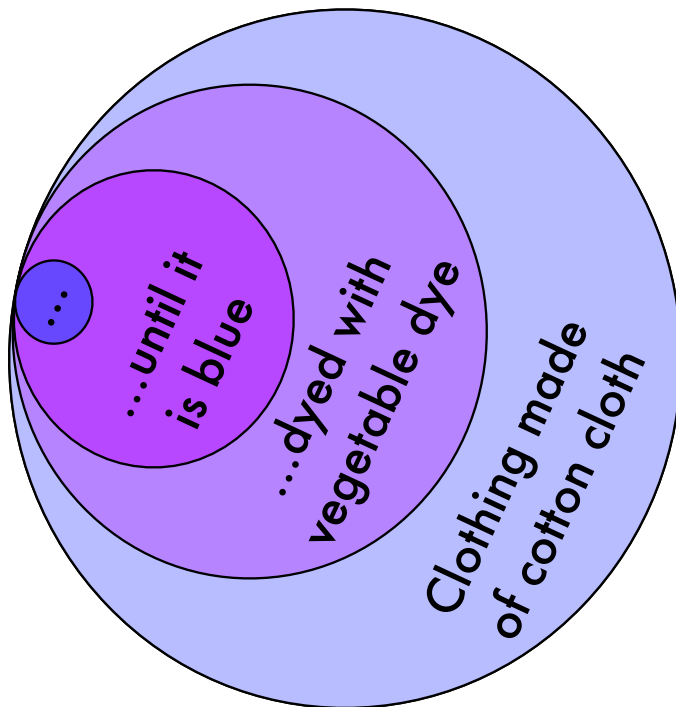
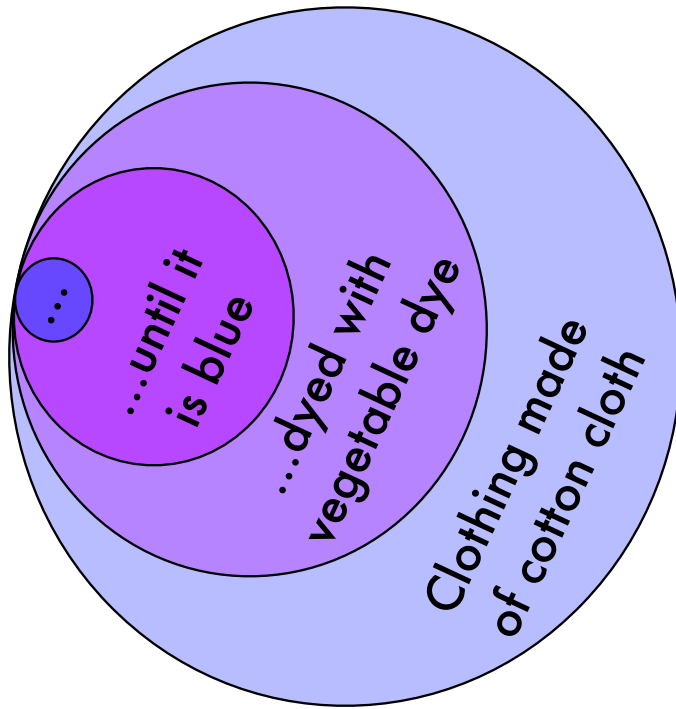
Claim strategy

→ Claim-drafting goals:

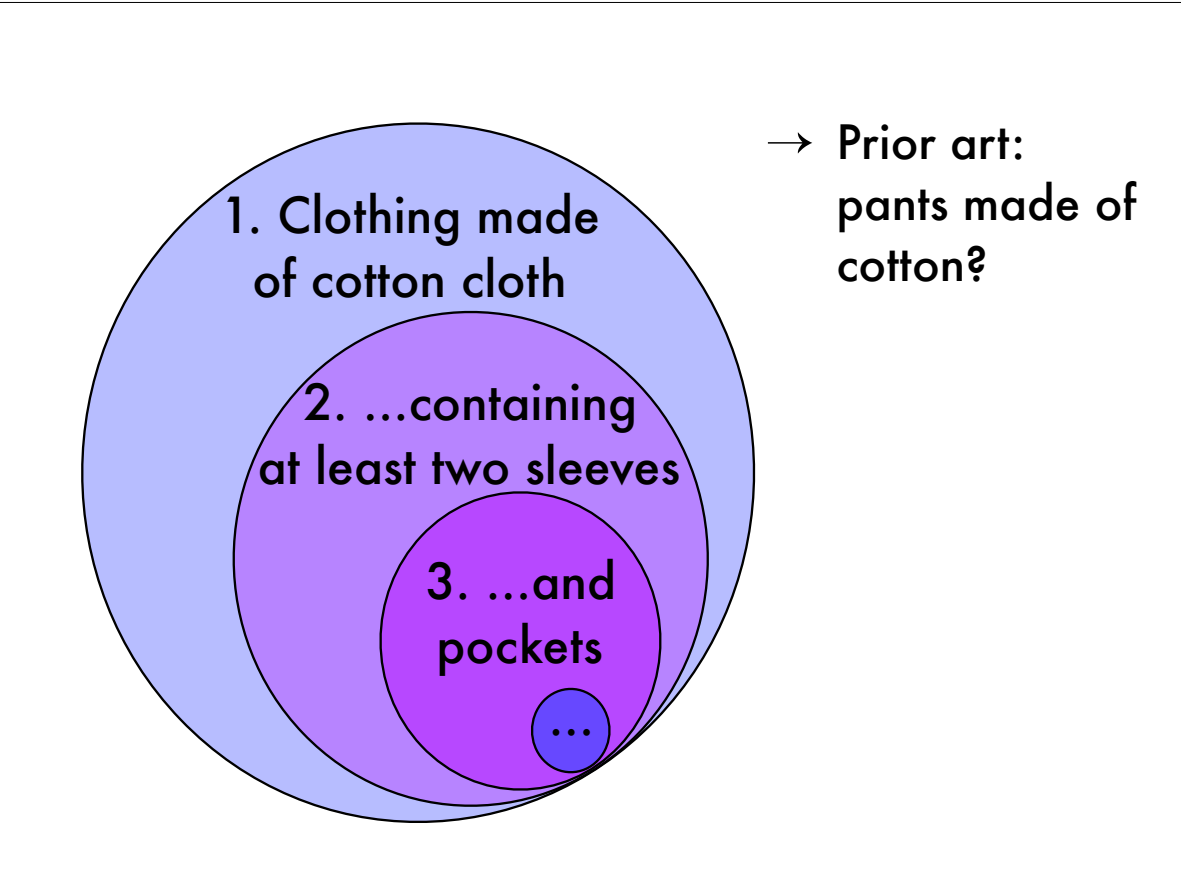
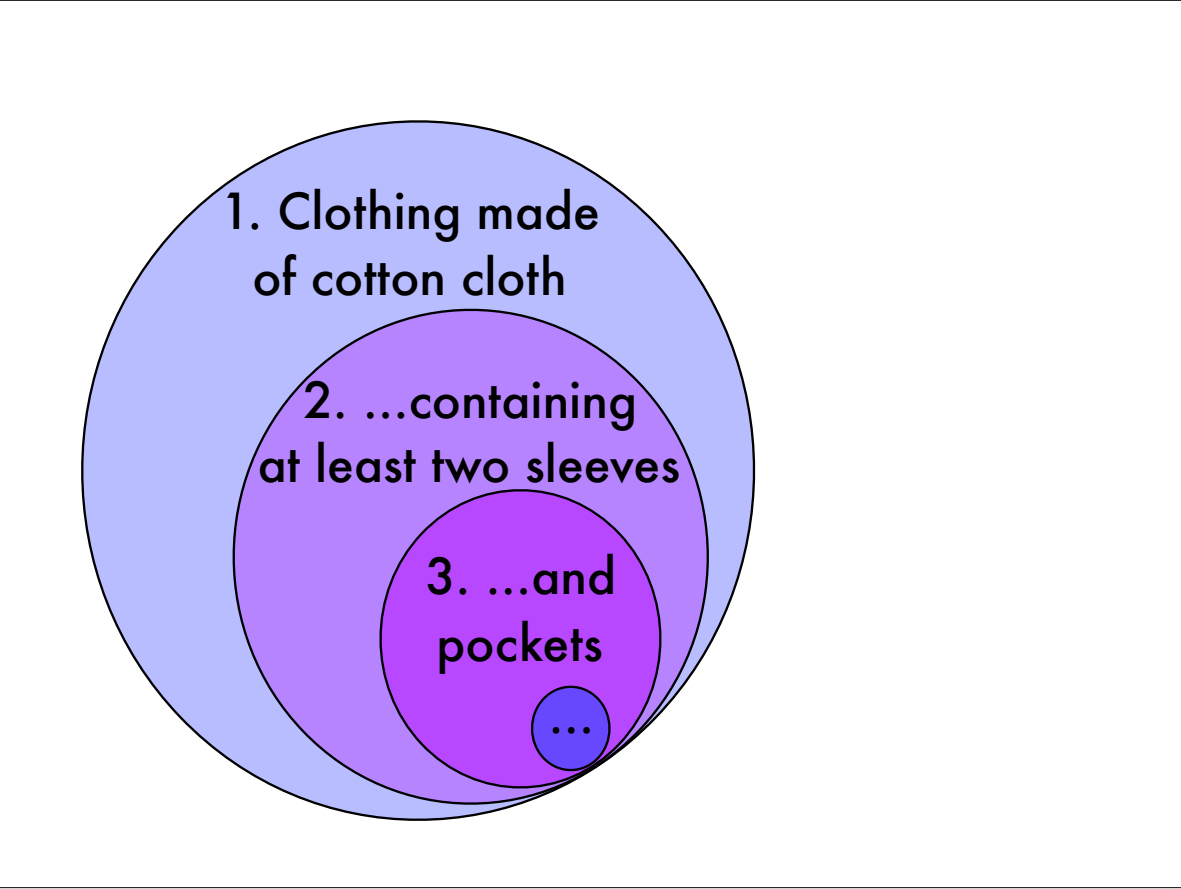
- Broadest possible claims
- But also valid claims
- Claims covering a variety of configurations of the invention

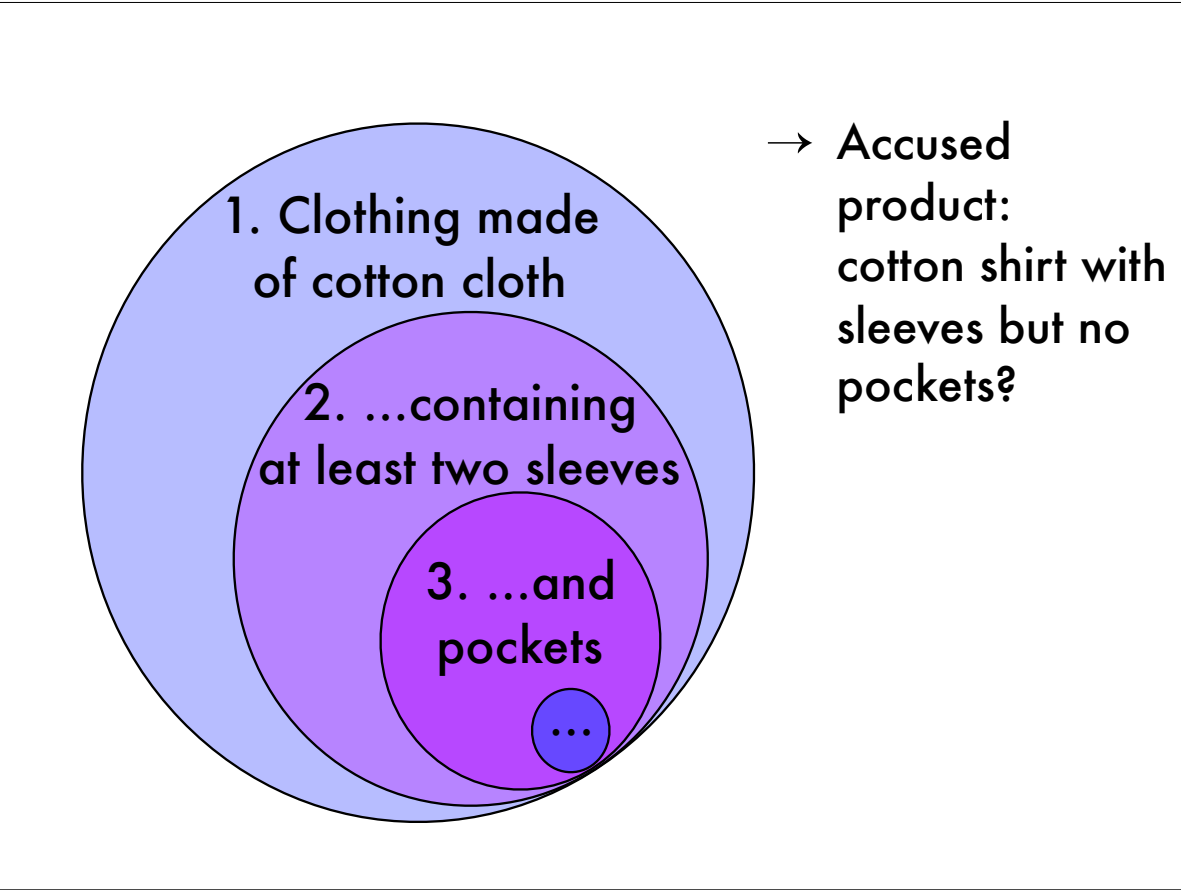
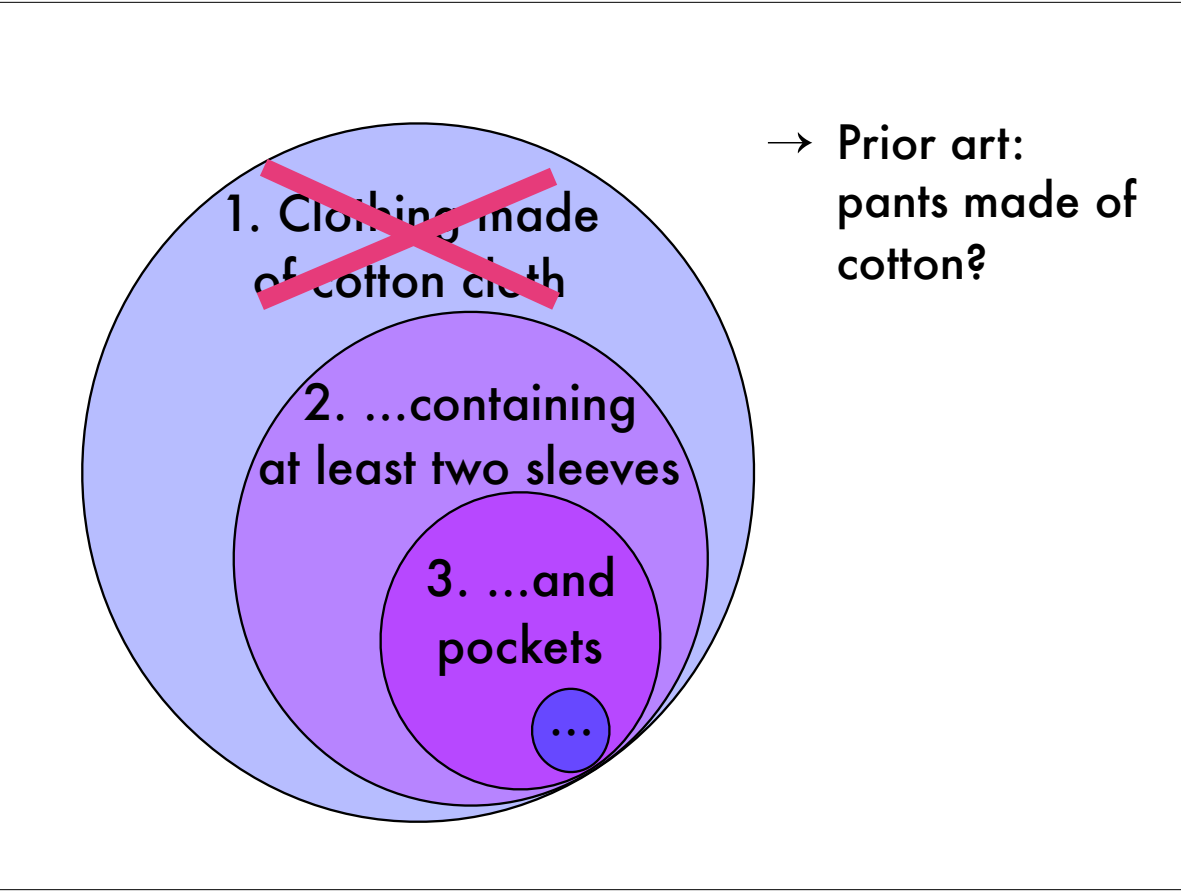
→ Your client's invention:
a blue cotton
shirt with
two pockets

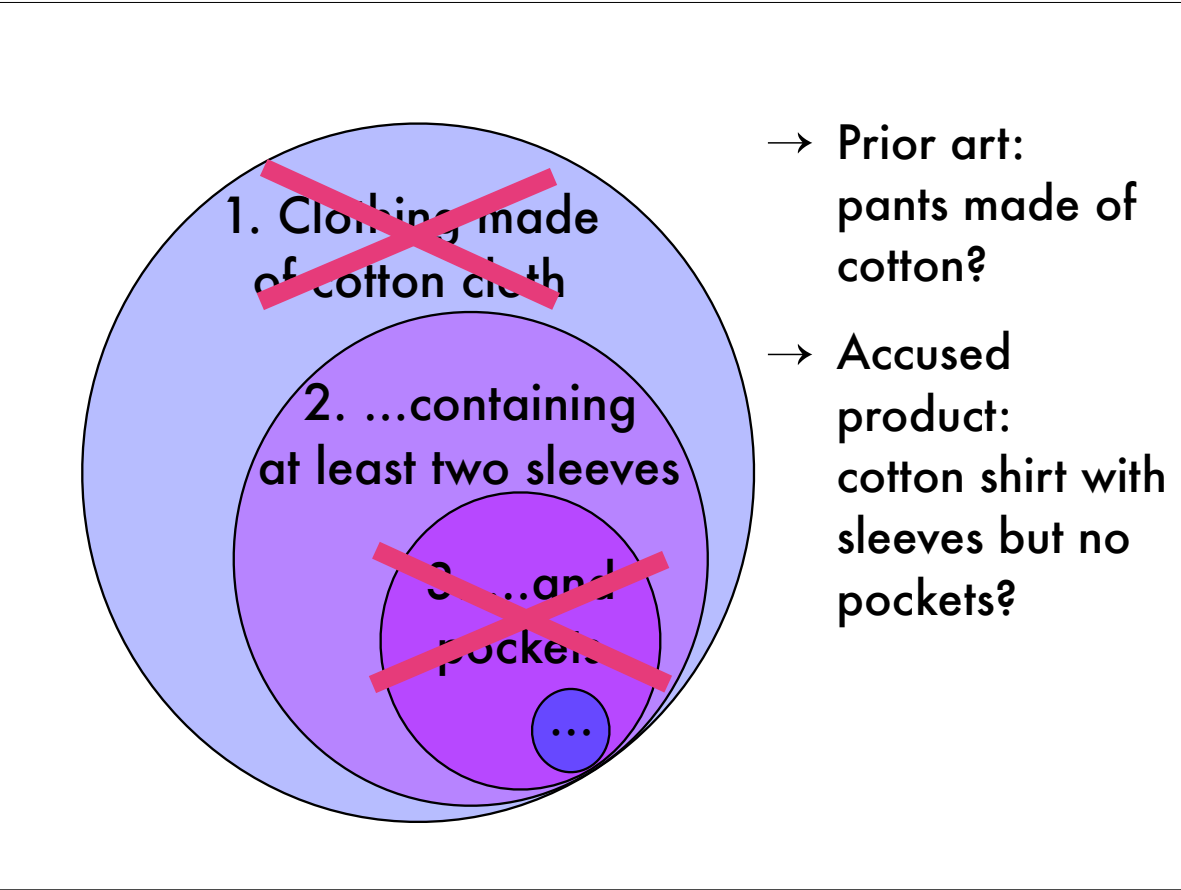
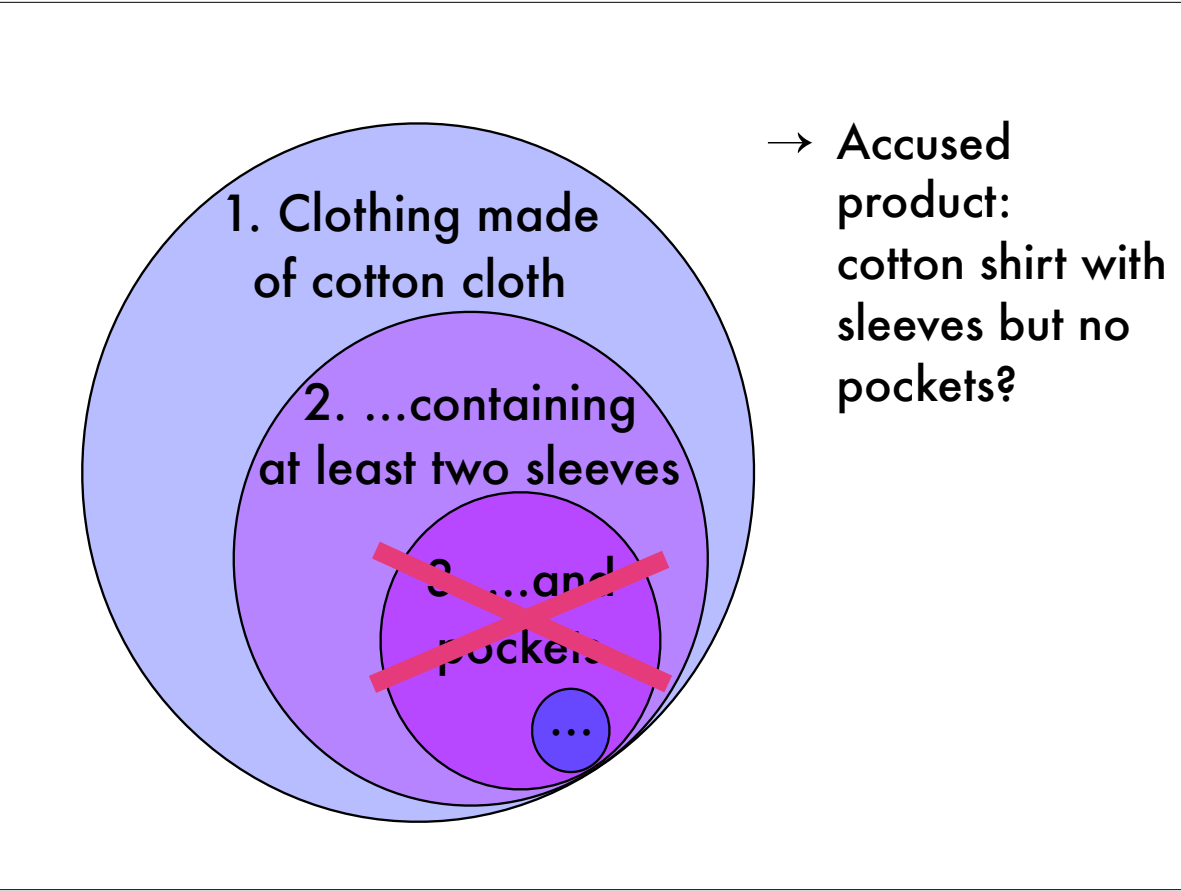




→ The point: You need to spend a lot of time brainstorming the different implications of your invention and the different ways to express it.

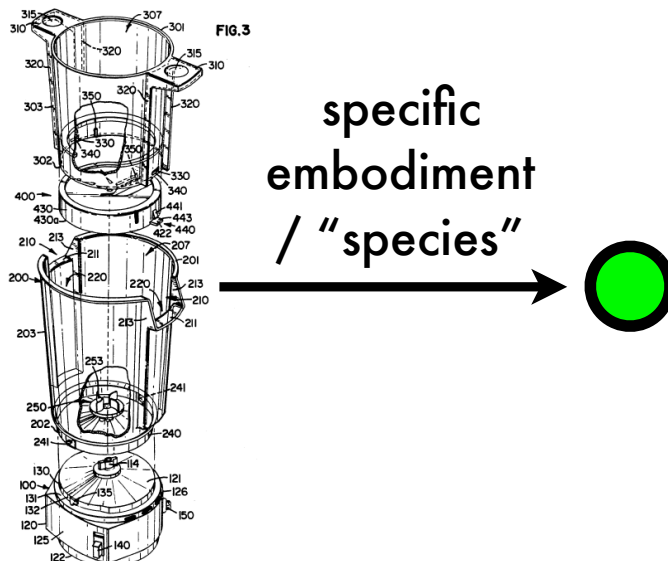




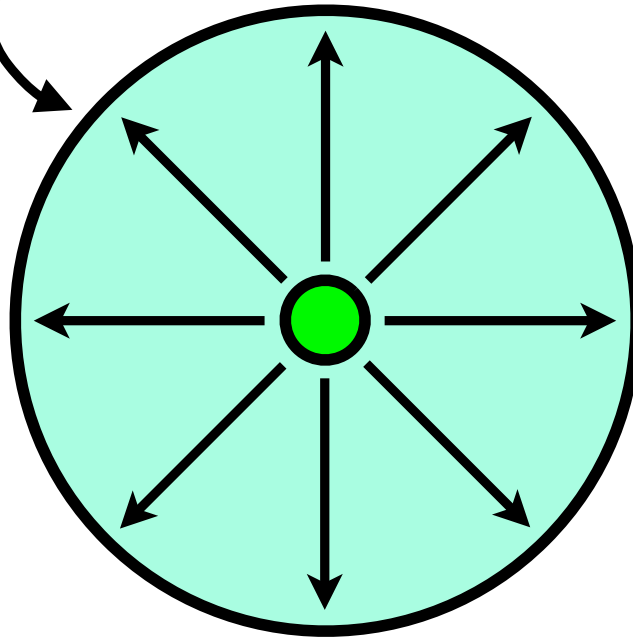
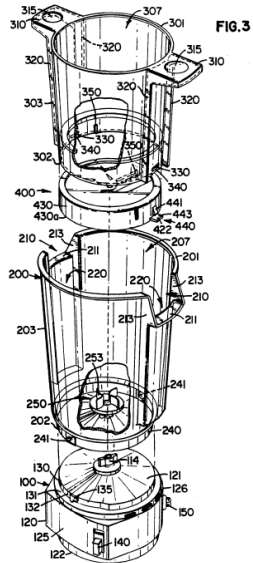


Claim strategy

- How do you craft a set of claims?
- One way:
 - Start with specific embodiment of the invention
 - Expand more broadly



conceptual invention / "genus"



**Claim-drafting
exercise**

Claim-drafting exercise

- Key features of the invention?
- Doesn't tear paper
 - Produces dry mark
 - Doesn't blot
 - Can be erased
 - Uses graphite/lead mixture as writing material and wood to hold writing material
 - Softer woods hold better

Claim-drafting exercise

- Key features of the invention?
- ~~Doesn't tear paper~~
 - ~~Produces dry mark~~
 - ~~Doesn't blot~~
 - ~~Can be erased~~ (?)
 - Uses graphite/lead mixture as writing material and wood to hold writing material
 - Softer woods hold better (?)

1. A device for writing, comprising:
 - a central portion; and
 - an outer portion, surrounding the central portion.
2. The device of claim 1, wherein the central portion is made of graphite.
3. The device of claim 1, wherein the central portion is made of lead.
4. The device of claim 1, wherein the central portion is made of a mixture of graphite and lead.
5. The device of claim 1, wherein the outer portion is made of wood.

1. A pencil comprising:
 - a chambered body; and
 - a lead composition enclosed within said chambered body.
2. The pencil as claimed in claim 1, wherein said chambered body is made of wood.
3. The pencil as claimed in claim 1, wherein said lead composition is made of a mixture of lead and graphite.
4. A pencil comprising:
 - a chambered body; and
 - means of making an erasable mark enclosed within said chambered body.
5. The pencil as claimed in claim 4, wherein said means of making an erasable mark is lead.

1. A device for creating marks comprising:
 - a stylus; and
 - a cladding that surrounds the stylus.
2. The device of claim 1, wherein the stylus comprises a material chosen from the group consisting of graphite, lead, or a mixture of graphite and lead.
3. The device of claim 1, wherein the cladding comprises wood.
4. The device of claim 1, further comprising:
 - an eraser comprising a material chosen from the group consisting of rubber, polymer resin, or powdered pumice combined with a binding material; and
 - a fastening band connecting the eraser to the cladding.
5. The device of claim 1, wherein:
 - the stylus is formed from a mixture of lead and graphite shaped into a cylinder having a diameter between 0.5 mm and 1.5 mm; and
 - the cladding is formed from a soft wood shaped into a hexagonal prism having a cross-section width between 1 mm and 10 mm; and further comprising
 - a cylindrical rubber eraser fixed to one end of the hexagonal prismatic cladding with a metal band crimped to the cladding and the eraser.

Claim-drafting exercise

- Things to think about:
- Are your claims narrow enough to exclude the prior art?
 - Are your claims broad enough to cover different configurations of the invention?
 - Are your claims flexible enough to cover future technological development?



Next time

Next time

→ Disclosure: enablement