

Patent Law

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January 14, 2015

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
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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,
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the purchaser identified by the identifier in the
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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,
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identifier of a purchaser of the item to a server
system;
under control of a single-action ordering component of
the server system,
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purchaser identified by the identifier in the received
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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.
4. The method of claim 1 wherein the single action is
speaking of a sound.
ge 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

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

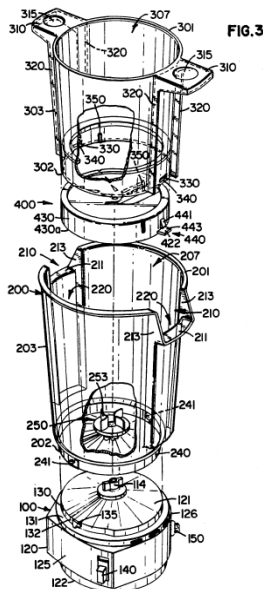
- “Comprising”: must include at least the listed elements
- “Consisting of”: must contain only the listed elements
- “Consisting essentially of”: must contain only the listed elements and others that do not substantially change the invention

Mechanics and formalities of claims

→ Body

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

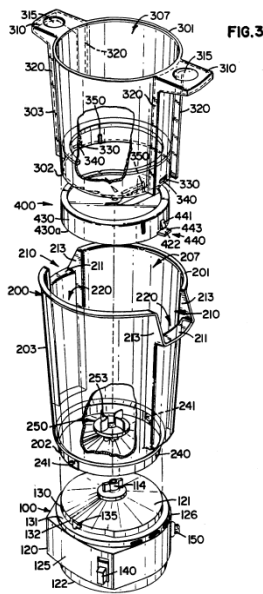
US patent 5,089,286



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:

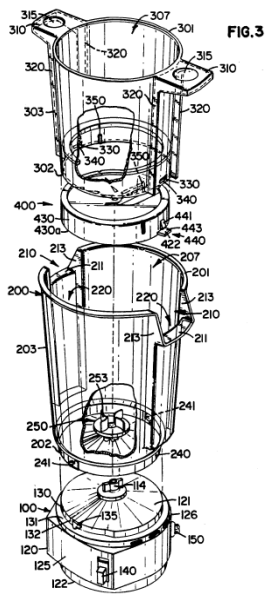
1. A vegetable cutter, comprising:
a frame having an open end and defining a retention compartment,
a container defining a retention chamber which is configured for reception within the retention compartment,
a means for rotating a vegetable retained within the retention compartment,
a blade assembly 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

→ 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

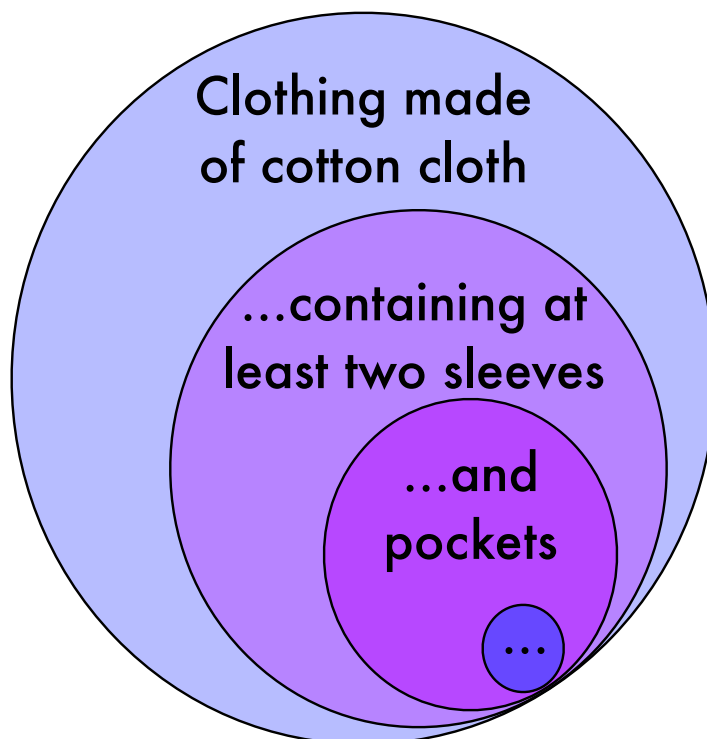
Claim strategy

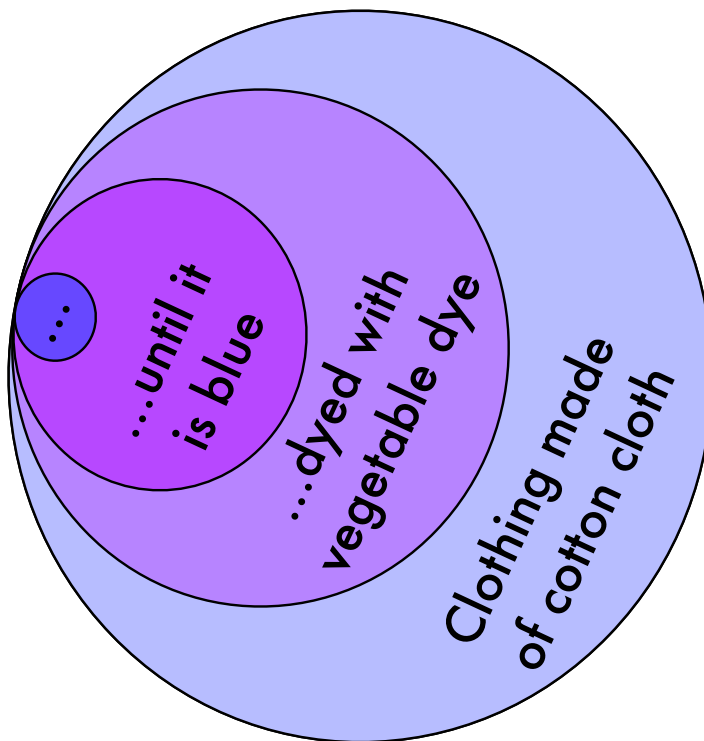
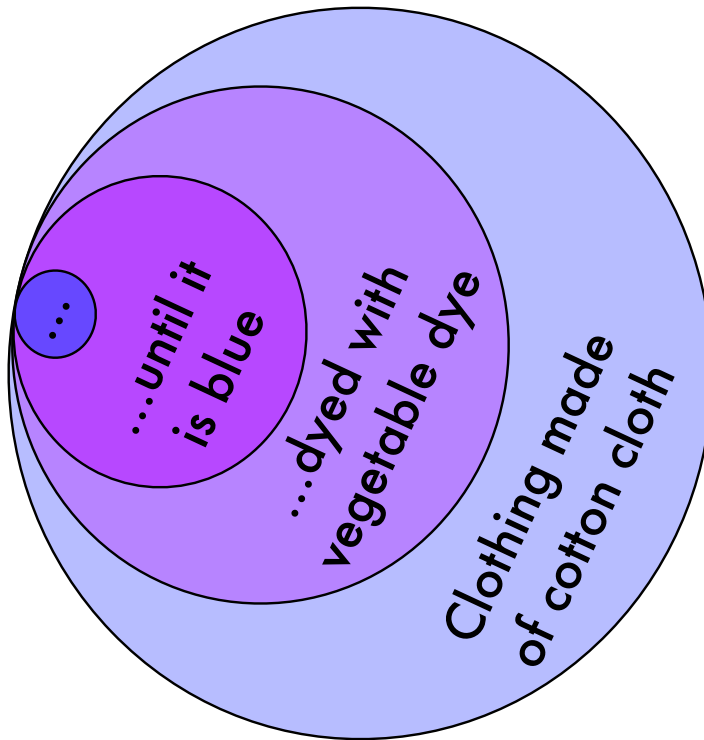
→ What's your goal?

Claim strategy

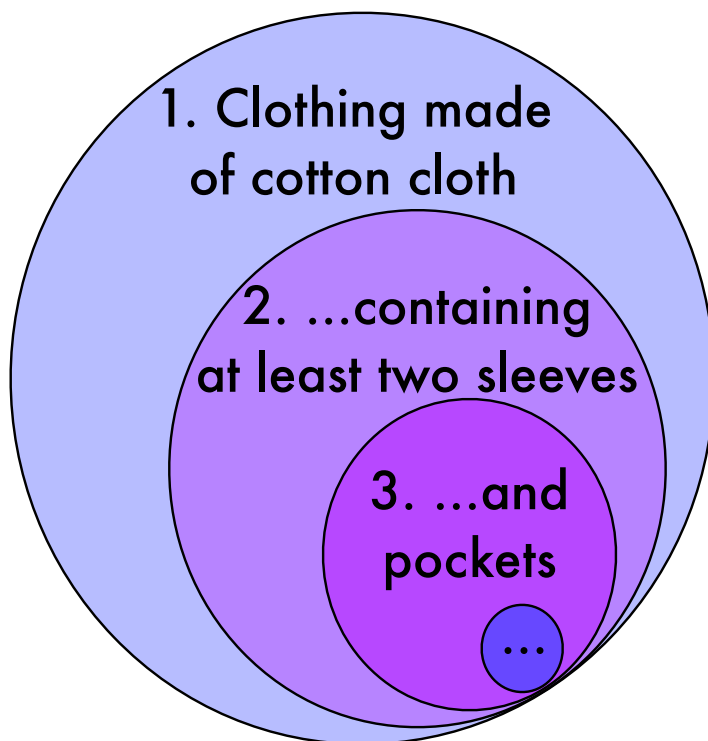
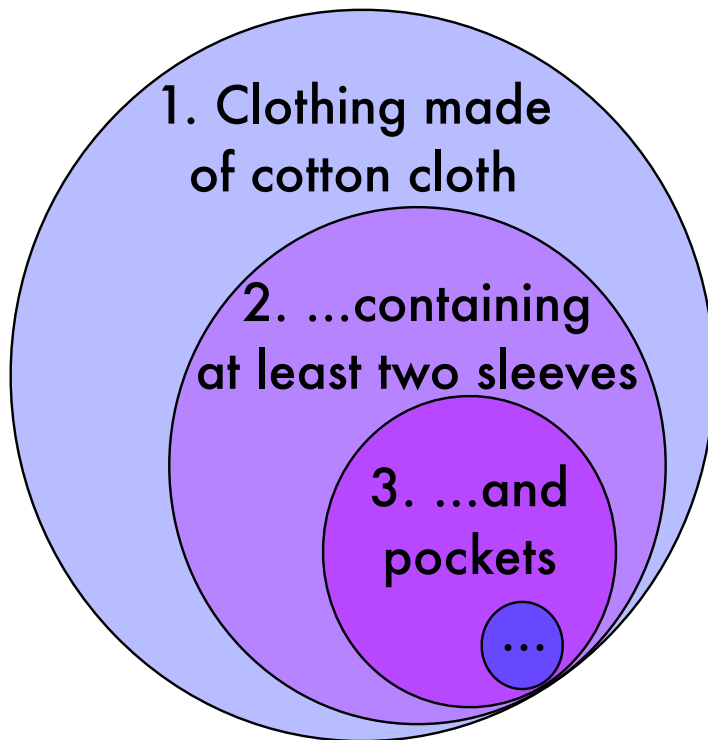
→ What's your goal?

- Broadest possible claims
- But also valid claims

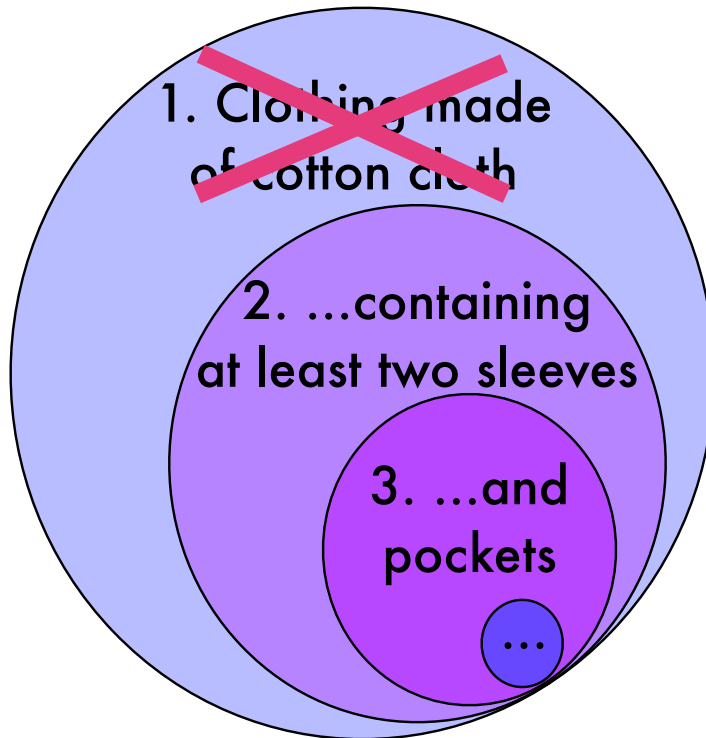




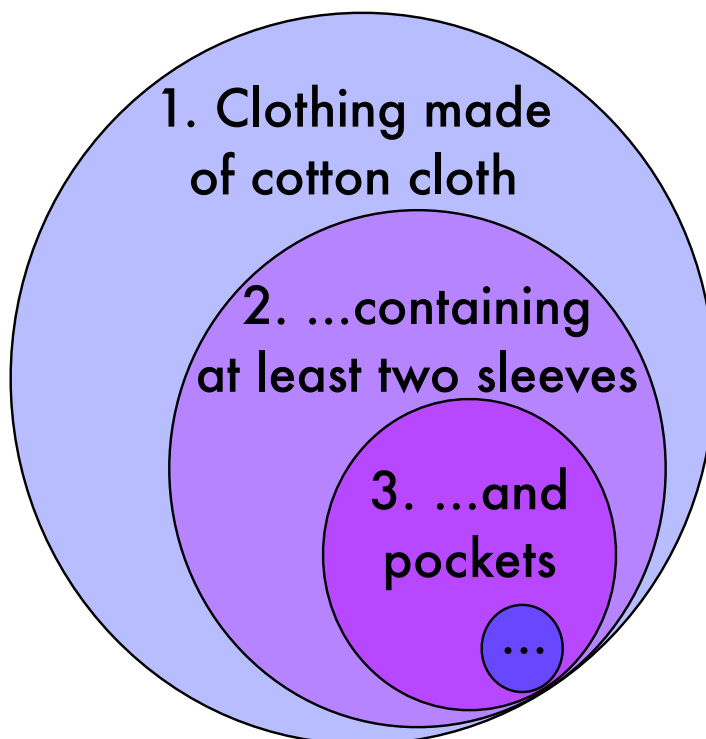
→ The point: You need to spend a lot of time brainstorming the different implications of your invention and the different ways to express it.



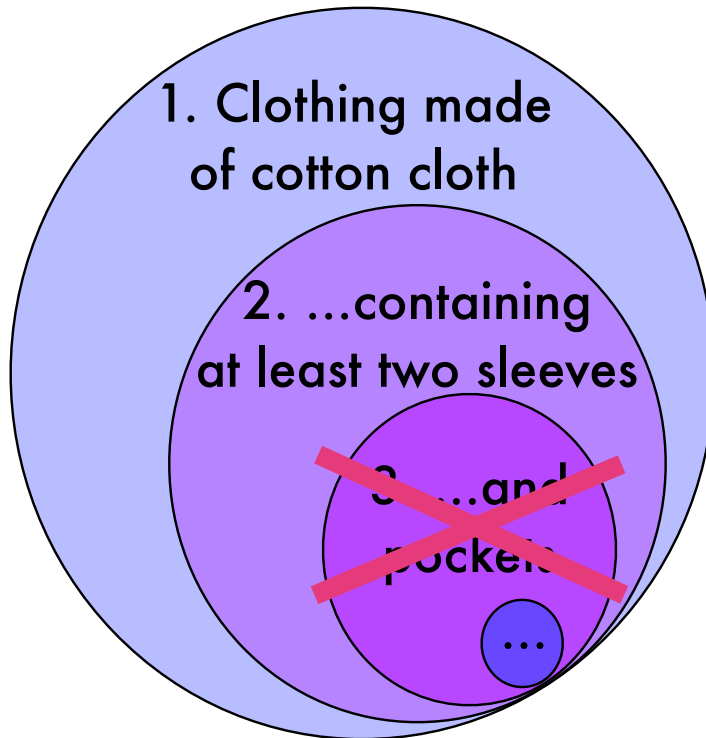
→ Prior art:
pants made of
cotton?



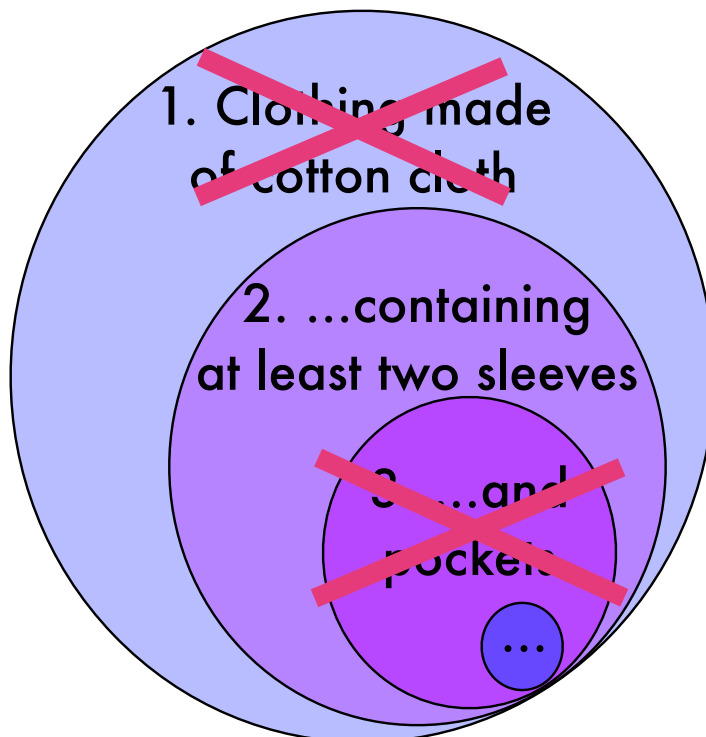
→ Prior art:
pants made of
cotton?



→ Accused
product:
cotton shirt with
sleeves but no
pockets?



→ Accused product:
cotton shirt with sleeves but no pockets?



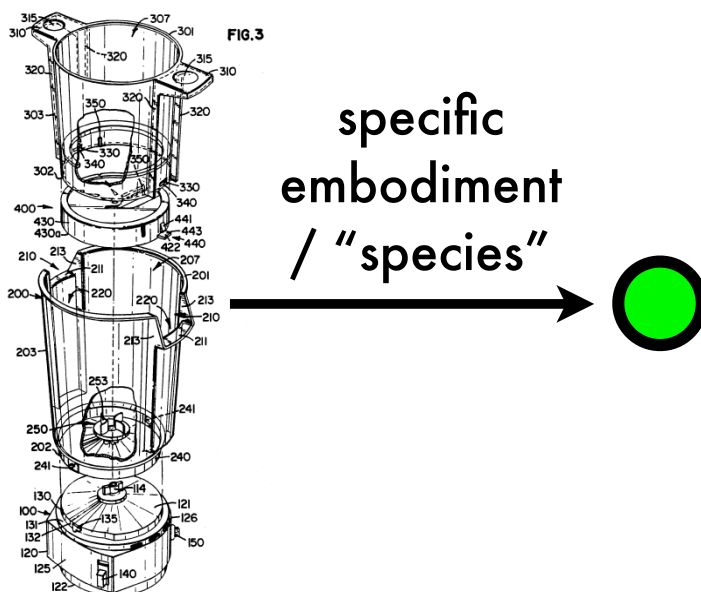
→ Prior art:
pants made of cotton?

→ Accused product:
cotton shirt with sleeves but no pockets?

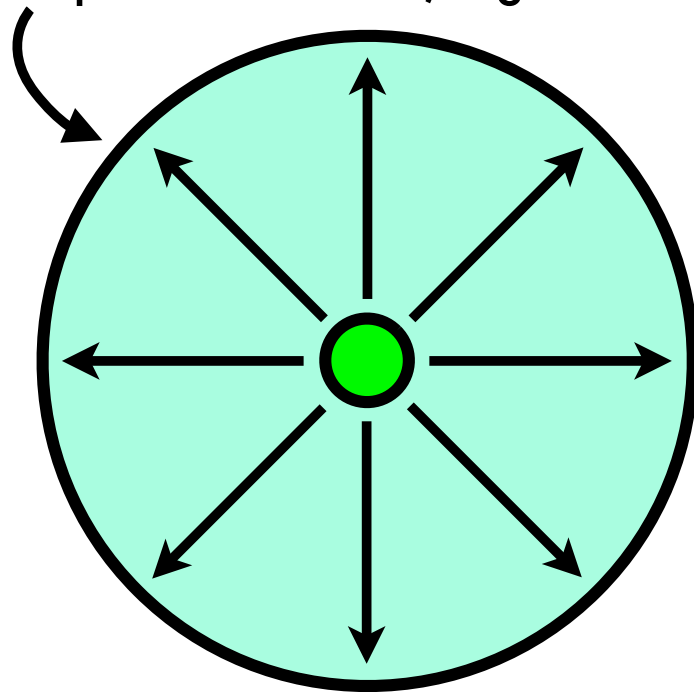
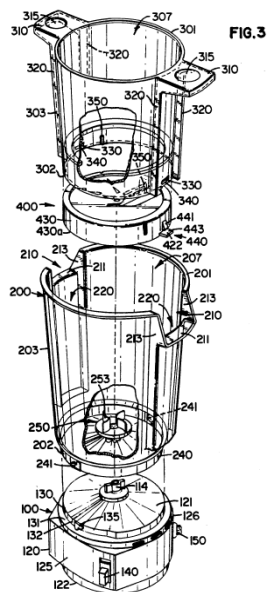
Claim strategy

→ How do you craft a set of claims?

- Start with specific embodiment of the invention
- Expand more broadly



conceptual invention / "genus"



Claim-drafting
exercise

Claim-drafting exercise

→ Key features of the invention?

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 writing instrument, comprising a composition soft enough to leave marks on a writing surface, and means for holding said composition in a position to mark a writing surface.

2. A writing instrument according to claim 1, wherein the composition includes a substantial amount of either lead or graphite.

3. A writing instrument according to claim 1, wherein the composition is comprised of approximately 60% graphite and 40% clay, and the base has attached to it a deformable eraser capable of substantially erasing marks made by the writing instrument.

1. A writing instrument comprising of a long rectangular rod of wood with a narrow, flat piece of lead or graphite or a mixture of graphite and clay stuck in the top of one end of the wood, which leaves a dark mark on the paper without tearing the paper.

2. A writing instrument comprising of a long rectangular rod of wood with a narrow, flat piece of mixture of graphite and clay with 60% graphite and 40% clay stuck in the top of one end of the wood.

* * *

6. A writing instrument according to claim 1, further comprising:

a small gob of rubber attached at the other end of the rectangular rod of wood, capable of erasing the mark.

1. A means of making written marks on paper or other light surfaces comprising: a combination of soft wood for the writer to grip the utensil, graphite sharpened into a point to make the written marks, and a rubber eraser on the opposite end of the graphite for removing the marks made by the graphite, and a means of holding them together.

2. A means of making written marks on paper or other light surfaces as recited in claim 1, further comprising: soft graphite which is hard and dark enough to make a dark written mark, but not hard enough to tear through the paper on which one is writing.

1. A pencil comprising:
a handle part; and
a writing part integrated with the handle part, capable of producing an erasable dark mark.
2. The pencil according to claim 1, wherein the writing part includes a portion extending from or mounted on a first end of the handle part.
3. The pencil according to claim 1, wherein the writing part is made of lead, graphite or composition thereof.
4. The pencil according to claim 3, wherein the composition of the writing part comprises about 30% - 90% of graphite and about 10%-70% of clay.
5. The pencil according to claim 4, wherein the composition of the writing part comprises about 60% of graphite and about 40% of clay.
6. The pencil according to claim 3, wherein the graphite is soft.

1. The inscription device is a new octagonal design cedar, wooden shape device, with a hollow in the middle.
2. The hollow in the middle as recited in claim 1, is for introducing a paste made with graphite and clay.
3. The paste recited in claim 2 is capable to produce a dark mark over the paper without spills the paste.

* * *

5. The inscription device recited in claim 1 comprising of a rubber device, which is fastened at the opposite from the writing side.

* * *

7. The rubber device recited in claim 5 is capable to erase, without tear the paper, what has been impregnated with the device recited in claim 1.



Next time

Next time

→ Disclosure: enablement