

Patent Claim Drafting Technique (Chapter VII)

Topic 13
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Overview

1. Sequence of drafting a Claim
2. Try !
3. Tips of drafting a Claim

1. Sequence of drafting a Claim

1. Sequence of drafting a Claim

✓ Definition of a Patent Infringement

1. A sleeping apparatus comprising:
two masts; and
a net whose one end is connected to one of the masts
and the other end is connected to the other of the masts.

B A X



The scope of patent is $X = A + B$.

The product including $X = A + B$ is an infringement product.

The product including only A or B is not an infringement in general.

1. Sequence of drafting a Claim

✓ Definition of a Patent Infringement

The product including $X = A + B + C$ is also an infringement product, if “comprising” is used in a Claim, not in Australia.

The product including $X = A + B + C$ is not an infringement product, if “consisting of” is used in a Claim.

Exceptionally, the product including only A or B may be an indirect infringement product, if the A or B is critically essential for A+B.

1. Sequence of drafting a Claim

✓ Patent Infringement

If A+B+C is claimed, even though C is unnecessary and the essential feature is only A+B, the product including A+B is not an infringement product.

Therefore, a Claim with the minimum number of the features is required as the broadest Claim.

1. Sequence of drafting a Claim

Recall the form of Claims !

1. X comprising:

A;

B; and

C

characterized by

D.

2. X according to Claim 1, wherein the is....

or

X according to Claim 1, further comprising....

1. Sequence of drafting a Claim

Recall the form of Claims !

1. X comprising:

A;

B; and

C

characterized in that

C is.....

2. X according to Claim 1, wherein the is....

or

X according to Claim 1, further comprising....

1. Sequence of drafting a Claim

Example

1. A fastening device for garment, comprising a first portion hanging on a support and a second portion supporting the garment, characterized in that the hanging portion is mounted fixedly on the support and wherein the second portion supporting the garment is detachable from said first portion, a quick mounting system combining the first and second portion.

1. Sequence of drafting a Claim

Example

1. A fastening device for garment, comprising:
a first portion hanging on a support; and
a second portion supporting the garment,
characterized in that
the hanging portion is mounted fixedly on the
support, and
wherein the second portion supporting the
garment is detachable from said first portion, a quick
mounting system combining the first and second
portion.

1. Sequence of drafting a Claim

1. Determine subject matters (X) for protecting an invention as independent claims

For example,

- A communication apparatus
- A receiver device of the communication apparatus
- A transmitter device of the communication apparatus
- A communication method
- A computer software medium for storing a computer executable software, and so on.

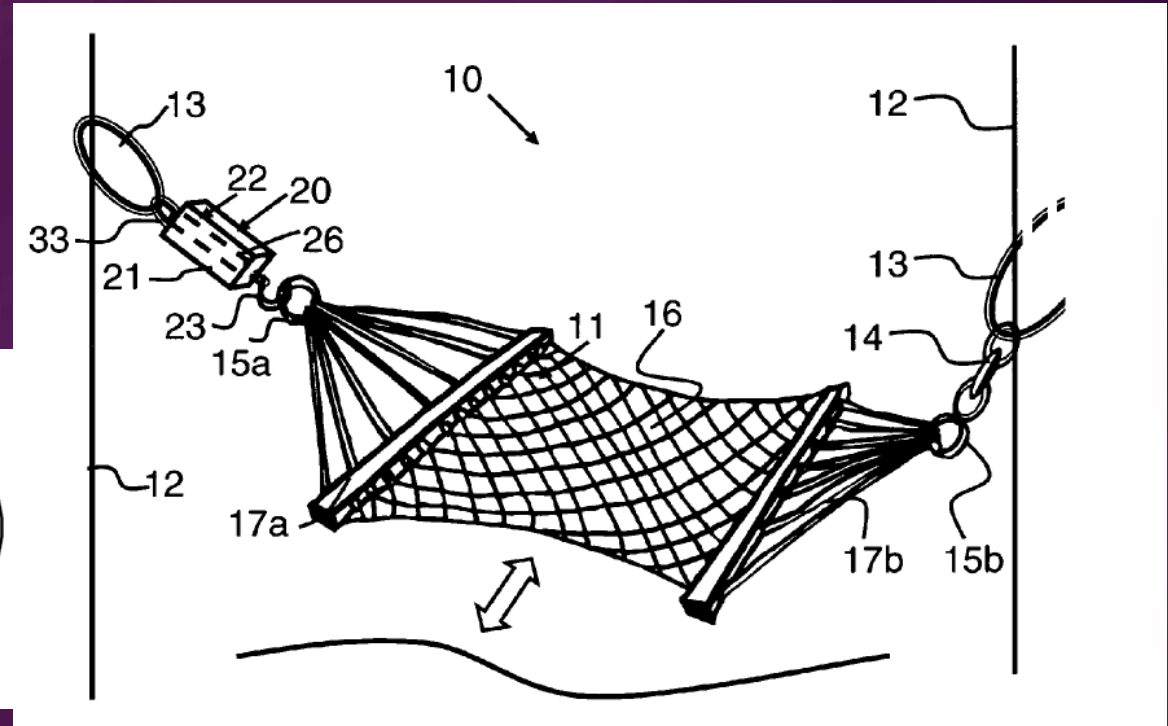
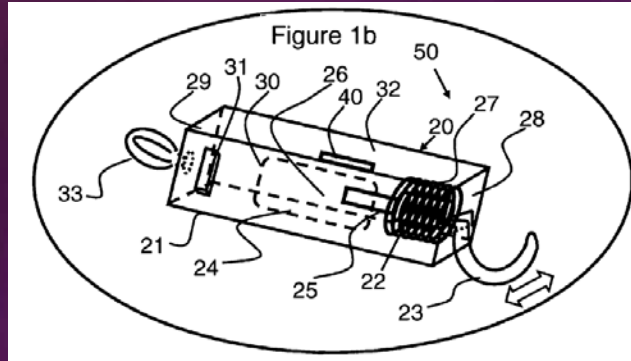
1. Sequence of drafting a Claim

1. Determine subject matters (X) for protecting an invention as independent claims

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1. Sequence of drafting a Claim



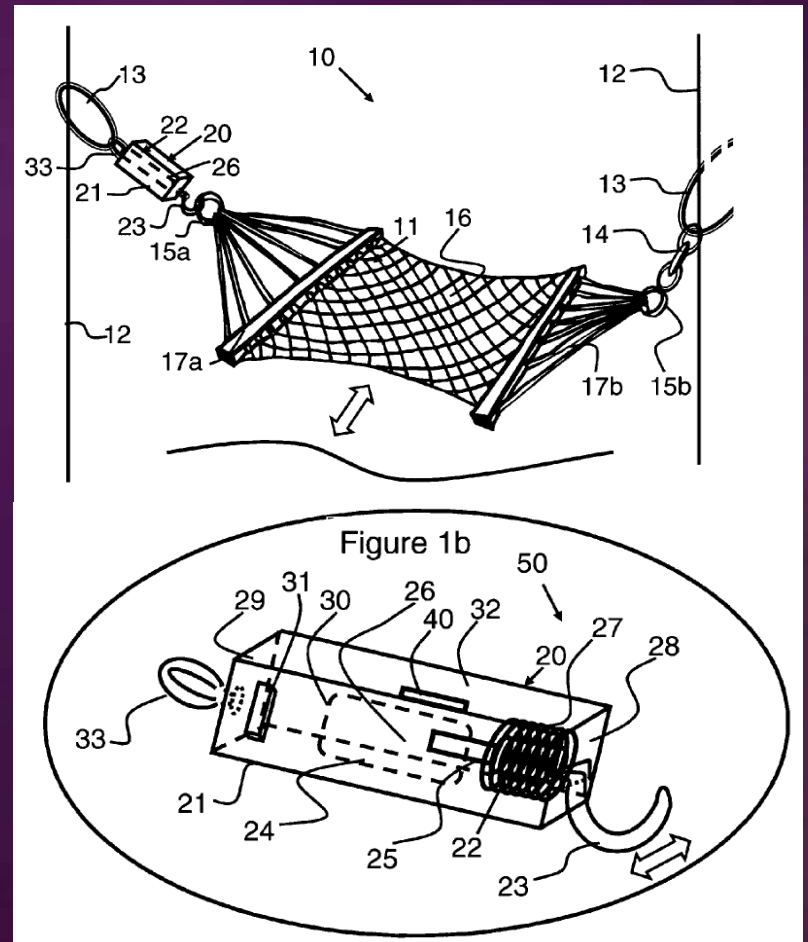
- A rocking machine
- A hammock with the rocking machine
- A rocking method for causing rocking motion

1. Sequence of drafting a Claim

✓ 2. List features(A, B,) of the inventions

A rocking machine

- a container
- a geared motor
- a torsion spring
- a hock
- a ring
- a pressure sensor
- a bar



1. Sequence of drafting a Claim

- ✓ **3. Choose essential features(A, B, ...) to be listed with paying attention to choose the minimum number of features.**

A rocking machine

- a container
- a geared motor
- a torsion spring
- a hock
- ~~a ring~~
- a pressure sensor
- a bar

1. Sequence of drafting a Claim

✓ 4. Put the subject matter and features into the form of a Claim.

1. A rocking machine comprising:
a container;
a pressure sensor;
a torsion spring;
a hock;
a geared motor; and
a bar.

1. Sequence of drafting a Claim

✓ 5. Add limitation words and phrases to specify the invention into each feature.

1. A rocking machine for provide a rocking motion to a hammock comprising:
a container;
a pressure sensor configured to actuate the geared motor,
a torsion spring arranged between the bar and the container;
a hock;
a geared motor configured to periodically reverse the bar; and
a bar connected to the hammock.

1. Sequence of drafting a Claim

✓ 6. Change the order of features according to recitations between the features.

1. A rocking machine for provide a rocking motion to a hammock, comprising:
a container;
a bar connected to the hammock;
a geared motor configured to periodically reverse the bar;
a torsion spring arranged between the bar and the container;
a hock;
a pressure sensor configured to enable the geared motor in a case where the pressure sensor detects a weight in addition to an weight of the object.

1. Sequence of drafting a Claim

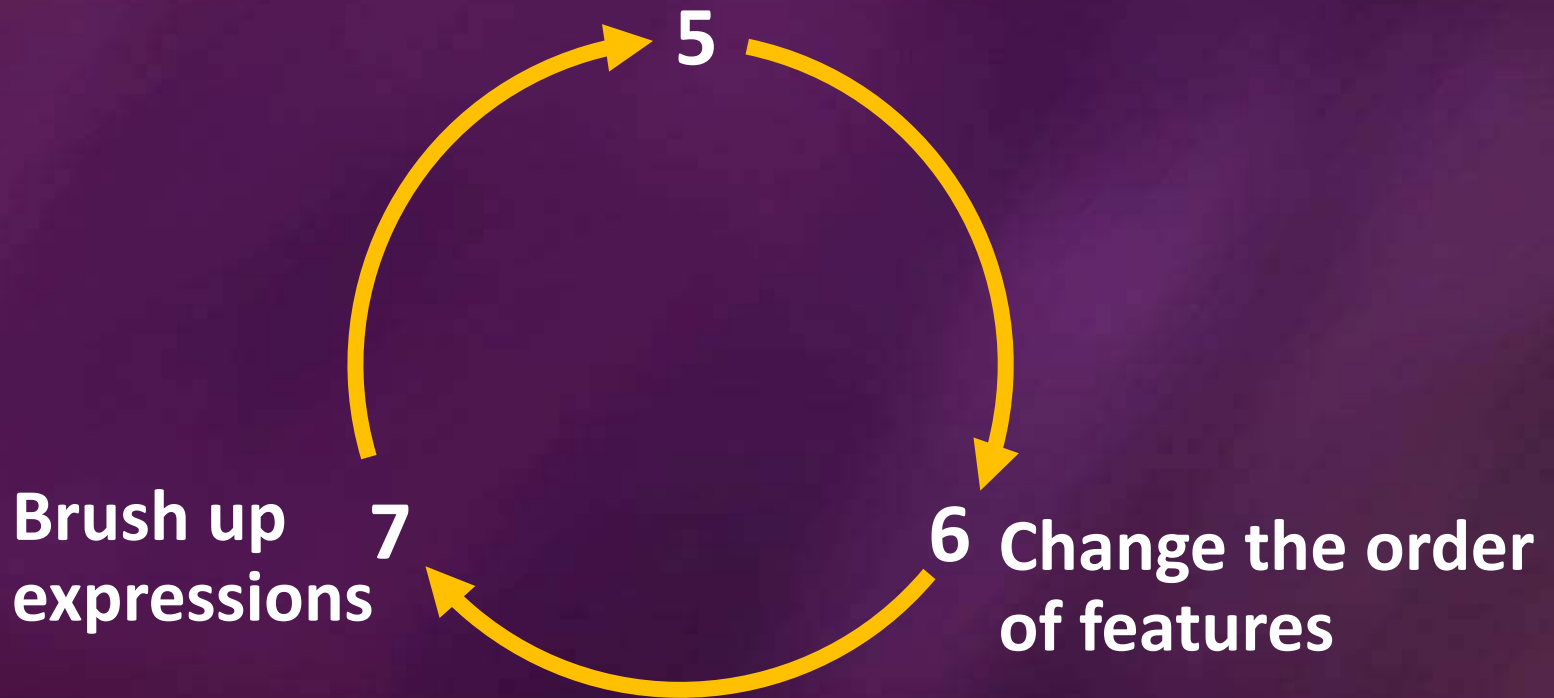
✓ 7. Brush up the expression of each features.

1. A rocking machine for provide a rocking motion to a ~~hammock~~ an object, comprising:
a container;
a bar positioned in the container, one end of the bar
connected to the object;
a geared motor configured to ~~periodically~~ move the bar in
a direction opposite to the bar;
~~a torsion spring~~ an elastic member arranged between
another end of the bar and an inner wall of the container; and
~~a hock~~;
a pressure sensor attached on the bar,
wherein the pressure sensor is configured to enable the
geared motor when the pressure sensor detects an additional
weight in addition to an weight of the object.

1. Sequence of drafting a Claim

- ✓ 8. Repeat steps 5 to 7.

Addition of limitation words and phrases



1. Sequence of drafting a Claim

✓ **9. Make dependent Claims to recover the words omitted in brushed-up process.**

2. A rocking machine according to Claim 1, further comprising a pressure sensor attached on the bar, wherein the pressure sensor is configured to enable the geared motor when the pressure sensor detects an additional weight in addition to an weight of the object.

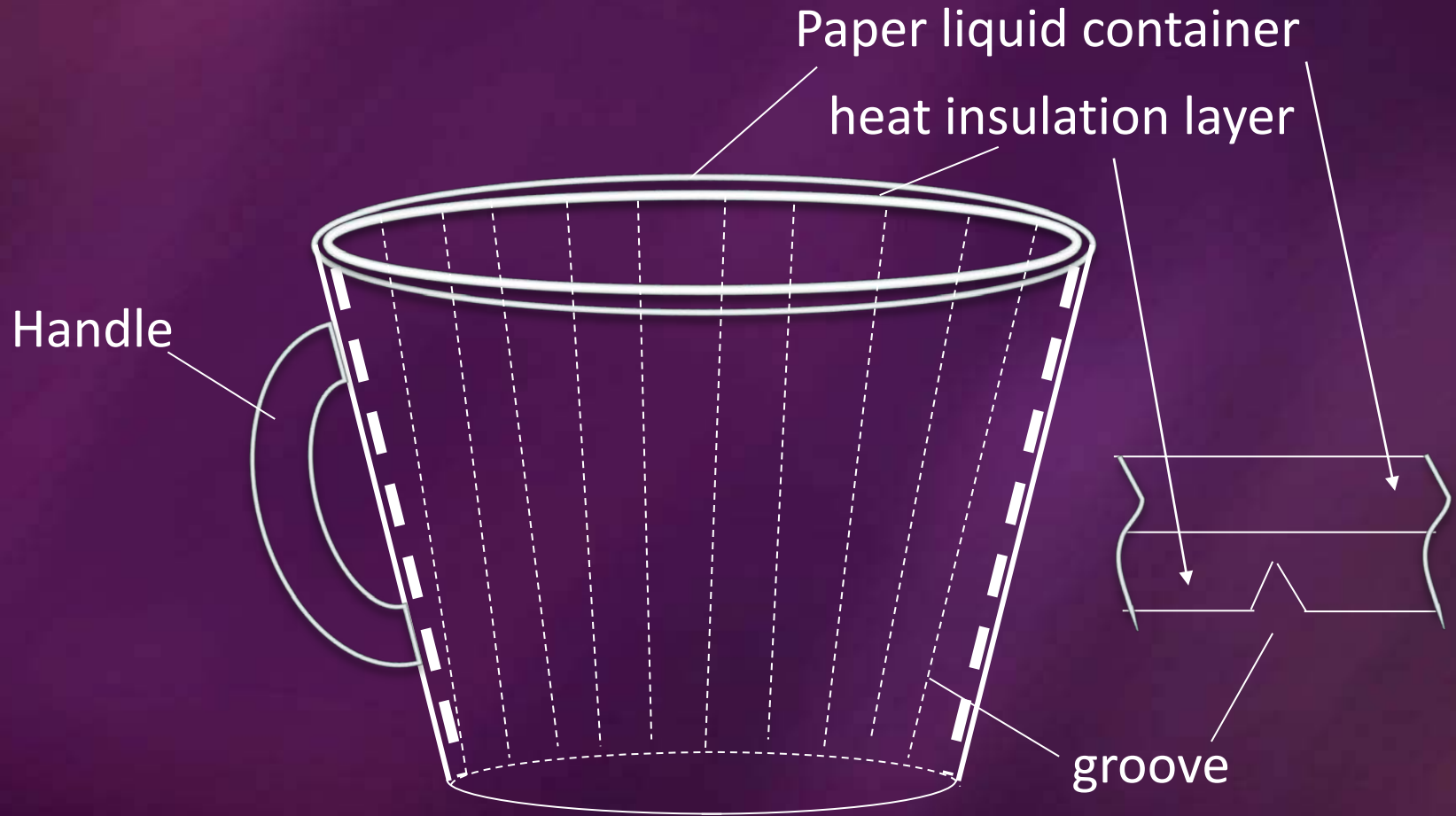
3. A rocking machine according to Claim 1, further comprising a hock for connecting the object.

2. Try !

2. Try!

- Invention to be protected

Paper cup



2. Try!

✓ Structure

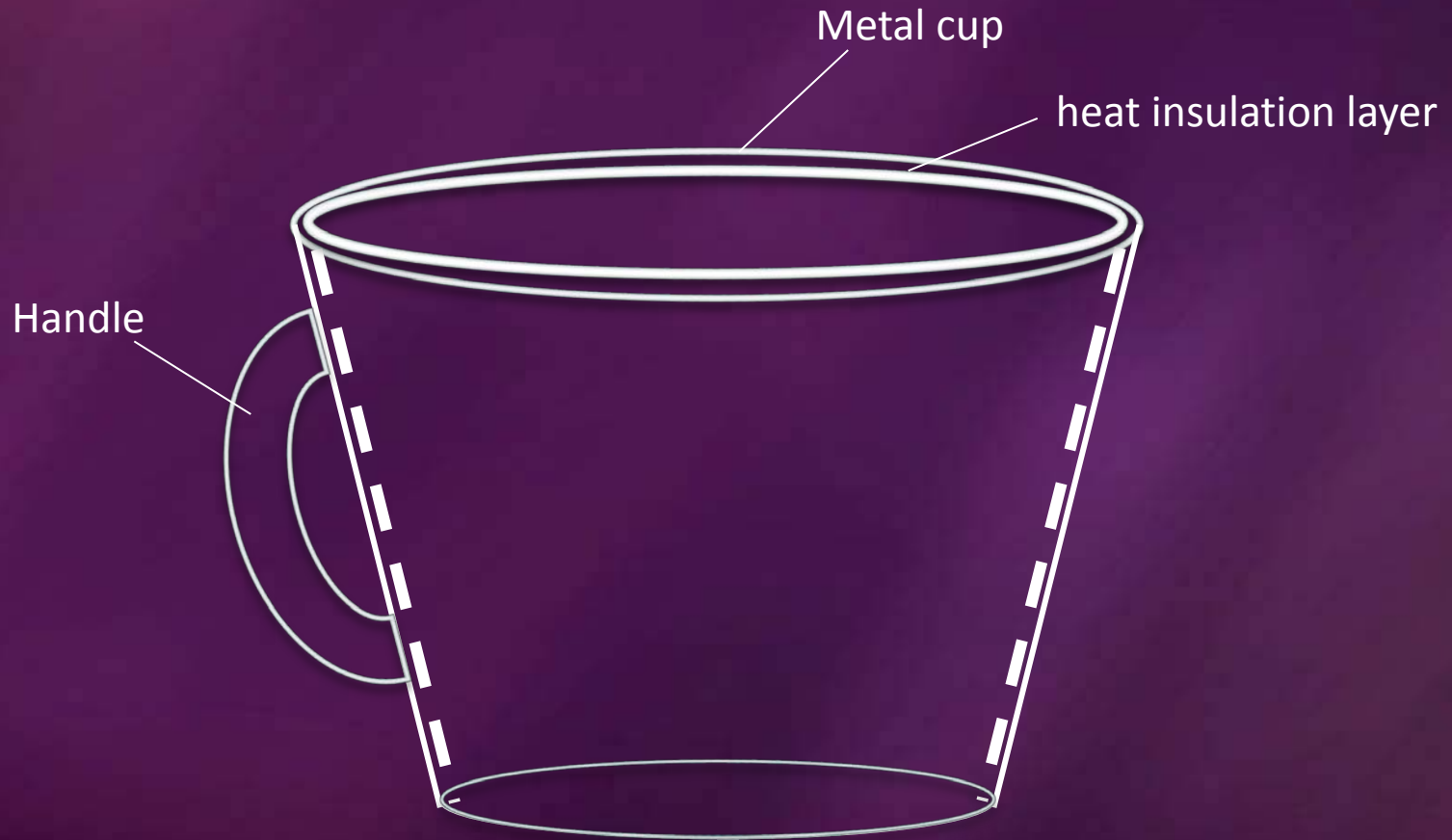
- A heat insulation liquid material is applied on the inner surface of the paper cup and dried to provide a cured heat insulation layer on the inner surface.
- The heat insulation layer has grooves.
- The paper cup has a handle on the side of the paper cup

✓ Effect of the invention

- Heat of the content of the container does not dissipate.
- A cup can be disposable because it is foldable.
- The handle facilitates handling the cup.

2. Try!

- Prior art Cup



2. Try!

- Competitor ceramic cup

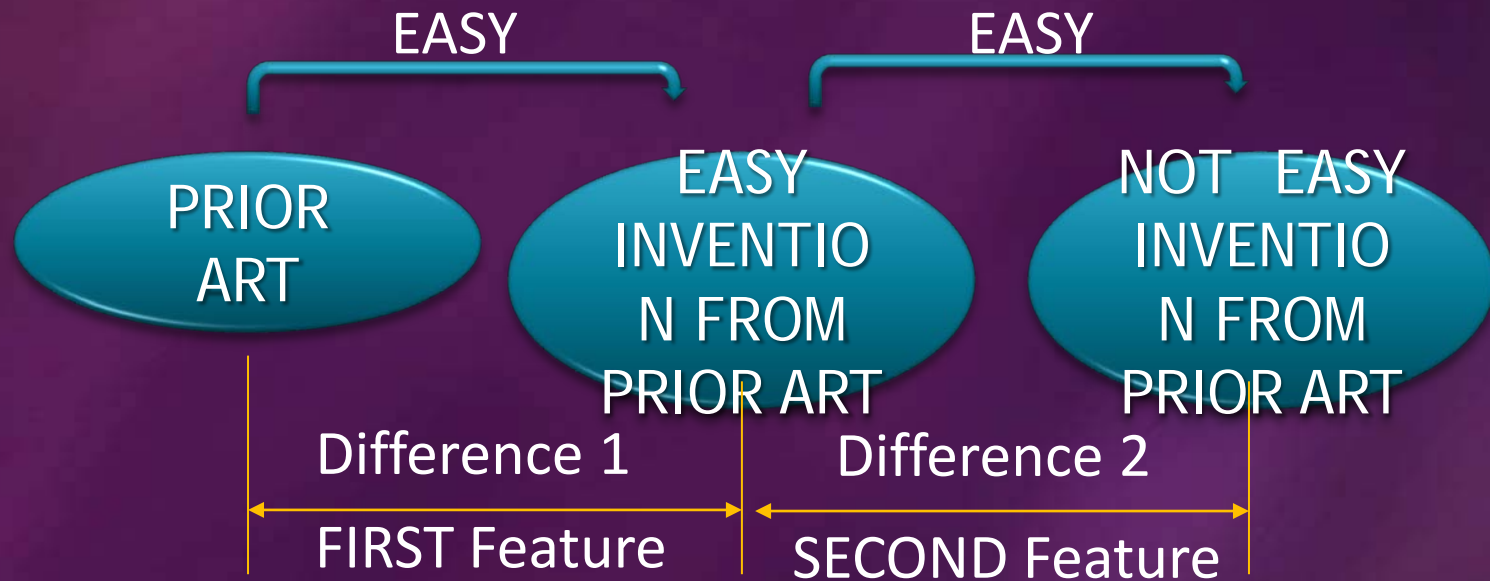


2. Try!

Example Answer

TRY!

EASY OF EASY IS NOT EASY !



“FIRST feature” is to overcome the novelty requirement.

“SECOND feature” is to overcome the inventive step requirement.

Of course, if the application of “FIRST feature” to the prior art is difficult, it can overcome the inventive step by only one difference of the feature. In this case, you have to explain the difficulty.

2. Try!

✓ In interview

- Focus on differences of the present invention from the prior art.
- Find two difference from the prior art and image a claim. The differences are the key point of the invention.
- If you find only one difference, extract the next one.
- If you find three or more difference, you should chose
- Imagine a claim to be made and categorize the feature to specify the conventional invention and to specify the created invention in the claim.

2. Try!

- ✓ Example Answer
 - What should the subject matter be ?
cup
 - What are options of features ?
paper container, heat insulation layer, grooves, handle
 - What are the essential features ?
paper container, heat insulation layer, grooves
 - Make a tentative form of Claim

2. Try!

- ✓ Example Answer
- Make a tentative form of Claim
 1. A cup comprising:
a paper container;
a heat insulation layer; and
a groove.

2. Try!

- Independent Claim Example 1

1. A cup comprising:
a paper container for containing a liquid;
a heat insulation layer provided on an inner surface
of the container; and
characterized by
at least one groove provided on the heat insulation
layer.

2. Try!

- Independent Claim Example 2

1. A cup comprising:

a container for containing a liquid, the container made of a low heat conductive material; and
a heat insulation layer provided on an inner surface of the container;
characterized by
at least one groove provided on the heat insulation layer.

2. Try!

- Independent Claim Example 3

1. A cup comprising:
a paper container for containing a liquid; and
a heat insulation layer provided on an inner surface
of the container,
characterized in that
the heat insulation layer has at least one groove.

2. Try!

- Independent Claim Example 4 (Functional Expression)
 1. A cup comprising:
 - a container for containing a liquid, the container made of a low heat conductive material; and
 - a heat insulation layer provided on an inner surface of the container,characterized in that the cup is foldable (by folding means).

2. Try!

- Dependent Claim Example 1

1. A cup comprising:
a paper container for containing a liquid; and
a heat insulation layer provided on an inner surface
of the container; and
wherein the cup is foldable by folding means.
2. A cup according to Claim 1, wherein the folding means is at least one groove provided on an inner surface
of the paper container.

2. Try!

- Dependent Claim Example 2

1. A cup comprising:
a container for containing a liquid, the container made of a low heat conductive material; and
a heat insulation layer provided on an inner surface of the container;
characterized by
at least one groove provided on the heat insulation layer.
2. A cup according to Claim 1, wherein the low heat conductive material is paper.

2. Try!

- Dependent Claim Example 3

1. a paper container for containing a liquid;
a heat insulation layer provided on an inner surface
of the container; and
at least one groove provided on the heat insulation
layer.

2. A cup according to Claim 1, further comprising at least one handle provided on an outside surface of the container.

2. Try!

- Dependent Claim Example 4

1. a paper container for containing a liquid;
a container for containing a liquid, the container made of a low heat conductive material;
a heat insulation layer provided on an inner surface of the container; and
at least one groove provided on the heat insulation layer.

2. A cup according to Claim 1, wherein the low heat conductive material includes glass material.

3. Tips of drafting a Claim

3. Tips of drafting a Claim

- Discussion 1

1. A cup comprising:
a container made of thick paper;
a heat insulation layer provided on an inner surface
of the container; and
at least one groove provided on the heat insulation
layer.

1. A cup comprising:
a container made of material having low heat
conductivity;
a heat insulation layer provided on an inner surface
of the container; and
at least one groove provided on the heat insulation
layer.

3. Tips of drafting a Claim

- Discussion 2

1. A cup for containing hot drink comprising:
a paper container for containing a liquid;
a heat insulation layer provided on an inner surface
of the container; and
at least one groove provided on the heat insulation
layer.

3. Tips of drafting a Claim

- Discussion 3 (Method claim)

1. A method of making a foldable paper cup, comprising (steps of):
 - preparing a paper container;
 - applying a liquid heat insulation material and drying the liquid heat insulation material to form a heat insulation layer ; and
 - cutting a surface of the heat insulation layer.

Note: “steps of” is added in past. In the latest practice, it tends to omit “steps of” in a method claims.

3. Tips of drafting a Claim

- Discussion 4 (Product by process claim)

1. A cup comprising:

a paper container for containing a liquid;

a heat insulation layer formed by applying a liquid heat insulation material and drying the liquid heat insulation material; and

at least one groove formed by cutting a surface of the heat insulation layer.

3. Tips of drafting a Claim

- Discussion 5 (a phrase related to a orientation)

1. A cup comprising:

a paper container for containing a liquid;

a heat insulation layer provided on an inner surface of the container; and

at least one groove cylindrically formed on the heat insulation layer.

3. Tips of drafting a Claim

- Discussion 5 (cont.)

right ↔ left

one side ↔ another side

front ↔ rear

one ↔ another

first member ↔ second member

3. Tips of drafting a Claim

- Discussion 6

1. A cup comprising:

a paper container for containing a liquid;

a heat insulation layer formed by applying a liquid heat insulation material and drying the liquid heat insulation material;

at least one groove formed by cutting a surface of the heat insulation layer; and

a handle folded in the paper container to allow pulling out to an outside surface of the container.

3. Tips of drafting a Claim

- Discussion 7

1. A cup comprising:

a container made of thick paper;

a heat insulation layer provided on an inner surface of the container; and

at least one groove provided on the heat insulation layer,

whereby the at least one groove enable the cup to be folded.

3. Tips of drafting a Claim

- Discussion 8 (means-plus-function claim)

1. A cup comprising:

a paper container for containing a liquid;

a heat insulation layer provided on an inner surface

of the container; and

means for enabling the cup to be folded.

3. Tips of drafting a Claim

- Discussion 8 (means-plus-function claim)

1. A cup comprising:
a paper container for containing a liquid;
a heat insulation layer provided on an inner surface
of the container; and
means for enabling the cup to be folded.

2. A cup according to Claim 1,
wherein the means for enabling the cup to be folded
includes at least one groove provided on the heat insulation
layer.

3. Tips of drafting a Claim

- Discussion 9 (necessary to explain, but not a feature)

1. A fastening device for garment, comprising:
a first portion hanging on a support; and
a second portion supporting the garment,
characterized in that

the hanging portion is mounted fixedly on the
support, and

wherein the second portion supporting the garment
is detachable from said first portion, a quick mounting
system combining the first and second portion.

Summary

- ✓ Making our a patent document
 - Foresee all events of a patent/a patent application of the invention and incorporate their measures into a patent document.
 - Design Claims and a specification with considering the relationship between those.

Summary

- ✓ Interview
 - Extract key points of the invention from the inventor.
 - In the interview, imagine a tentative claim.
 - Explain patentability to fill in the gaps between your understanding and the client understanding.
 - Get information regarding a competitor's, a third party's, sales and any improvement information.

Summary

- ✓ Claim drafting
 - Chose the best subject matter and features to make the broadest Claim.
 - Design the whole set of Claims not one Claim.
 - Pay attention to make the broader claim by claim words and the supplemental description in the specification
 - Always pay attention to words, phrase and sentences.

Thank you for your attention.

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