



WIPO National Patent Drafting Course

organized by the World Intellectual Property Organization (WIPO)
in cooperation with

the Department of Intellectual Property (DIP), Ministry of Commerce of Thailand
and with the assistance of the Japan Patent Office (JPO)

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August 29 to October 30, 2016 (follow-up session)

Introduction and Theory of Patent Claims
Protection of Inventive Concepts

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Patent ABC

**P
A
T
E
N
T**

= **A** >

Technical Description
of a technical solution to a problem

+

= **B** >

Legal Instrument
to exclude others from commercial exploitation

+

= **C** >

Business Tool
providing a opportunities in the market

Thai Patent Act B.E. 2522 (1979) Section 5

Subject to Section 9, a **patent may be granted only** for an invention in respect of which the following **conditions** are satisfied:

- (1) the invention is **new**;
- (2) it involves an **inventive step**; and
- (3) it is capable of **industrial application**.

Thai Patent Act B.E. 2522 Section 6

An invention is **new if** it does not form part of the state of the art.

The state of art also includes any of the following inventions:

(1) ...;

(2) ...;

(3)....;

(4) ...;

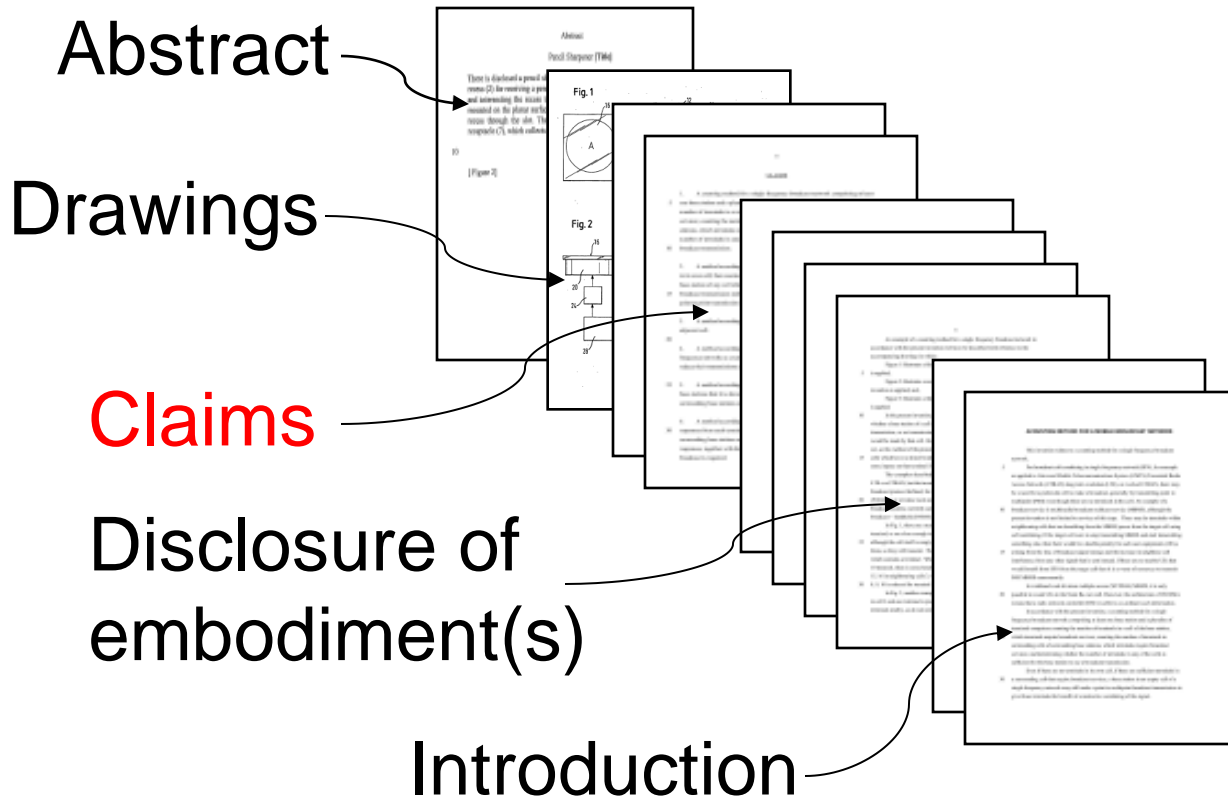
(5)

..... shall not be deemed to be a disclosure under subsection (2) above.

Thai Patent Act B.E. 2522 Section 7

An invention shall be taken to involve an **inventive step** if it is not obvious to a person ordinary skilled in the art.

Application for a Patent



Novelty

An invention is novel when

any real **differences exist**

between the **claimed** invention and the disclosure of a single prior art source.

Issue of Obviousness of a Claim

A claimed invention is **not patentable**

if at the priority date of the claim it would have been obvious to an ordinary person skilled in the art to have arrived at

something falling within the **scope of the **claim**.**

Patent Act B.E. 2522 Section 17

The application for the patent shall comply with the rules and procedures as prescribe in the Ministerial Regulations.

The application for a patent shall contain:

- (1) the **title** of the invention;
- (2) brief statement of its nature and **purposes**;
- (3) a **detailed description** of the invention in such **full, concise and clear** and exact terms as **to enable** any person ordinarily skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention and setting forth the best mode contemplated by the inventor to carry out his invention;

Patent Act B.E. 2522 Section 17 (continued)

- (4) **one or more clear and concise claims;**
- (5) other items prescribed in the Ministerial Regulations

In cases where Thailand acceded to **an international agreement or cooperation on patents**, the patent application which is in compliance with the requirements of such international agreement or cooperation shall be deemed to be a patent application under this Act.

Ministerial Regulation No 21 (B.E. 2542)

Clause 3

The description shall state the **title** of the invention as it appears in the application and shall:

- (1) state the nature and **purposes** of the invention;
- (2) specify the **technical field** to which the invention relates;
- (3) indicate the related **background art** which can be regarded as useful for the understanding, searching and examination of the invention and cite the relevant documents, if any;

Ministerial Regulation No 21 (B.E. 2542)

Clause 3 (continued)

- (4) **disclose the invention** in a full, clear and concise manner in terms that will **enable a person** of ordinary skill in the art to which it pertains **to make and use the invention**;
- (5) briefly **describe the figures** in the drawings, if any;
- (6) set forth the **best mode** contemplated by the inventor for carrying out the invention by providing, where necessary, examples, the related background art and drawings;

Ministerial Regulation No 21 (B.E. 2542)

Clause 3 (continued)

(7) show in what way the invention is applicable in industry, handicrafts, agriculture or commerce if that is not obvious from the nature of the invention.

The manner and order specified in the preceding paragraph shall be followed except when a different order would result in a better understanding but in every case the **appropriate heading shall be given.**

Ministerial Regulation No 21 (B.E. 2542)

Clause 4

Claims shall state in **clear and concise** manner, consistent with the description under Clause 3, those features of the invention for which protection is sought.

If there are drawings, the claim may refer to a **technical feature** of the invention by stating the **reference number** or symbol indicated in the drawings in the **parenthesis** following the statement describing such technical feature.

Ministerial Regulation No 21 (B.E. 2542)

Clause 4 (continued)

If a single claim cannot adequately cover all the technical features of the invention, two or more **independent claims** of the **same category** may be made in a single application.

Ministerial Regulation No 21 (B.E. 2542)

Clause 4 (continued)

Dependent claims, if desired, shall follow the independent claim and shall state the additional features claimed. References to independent or dependent claims shall be made in the alternative only.

For the purpose of this clause, an **independent claim** shall mean a claim which does not refer to features contained in other claims and **dependent claims** shall mean those which, while including additional features, refer to features contained in independent claims or in other dependent claims.

Ministerial Regulation No 21 (B.E. 2542)

Clause 5

An application containing **claims** as described below shall be construed as relating to a single invention:

(1) in addition to an independent claim for a **product** for which protection is sought, other independent claims setting forth the **process a manufacture and use of the product**.

(2) In addition to an independent claim for a process for which protection is sought, claims for the means and/or **apparatus for carrying out process**.

Ministerial Regulation No 21 (B.E. 2542)

Clause 6

The **abstract** shall, in accordance with rules prescribed by the Director-General, consist of a summary of the disclosure as contained in the description, claims and any drawings, if any; and the summary shall **briefly** indicate each main technical feature and shall be drafted in a way which allows better understanding of the **technical problem and its solution** through the invention and the use of the invention.

Ministerial Regulation No 21 (B.E. 2542)

Clause 7

The drawings shall be clear, consistent with the description and in compliance with the principles on drawings.

For the purpose of this Clause, drawings shall also mean plans and charts.

Patent Act B.E. 2522 Section 18

The application for patent shall relate to only one invention or to a group of inventions which are so linked as to form **a single inventive concept.**

Patent Act B.E. 2522 Section 20

The applicant may amend his application for a patent in accordance with the rules and procedures prescribed in the Ministerial Regulations, provided that such **amendment does not enlarge the scope** of the invention.

Patent Act B.E. 2522 Section 26

In the examination of an application if it appears that the application relates to several distinct inventions which are **not so linked as to form a single inventive concept**, the competent officer shall give a notice to the applicant requiring him to **separate the application** into a number of applications, each of which relates to a single invention.

Patent Act B.E. 2522 Section 36

No other person except the patentee shall have following rights:

- (1) ... to produce, use, sell, have in the possession for sale, offer for sale or import the patented product;
- (2) ... to use the patented process, to produce, use, sell, have in the possession for sale, offer for sale or import the product produced by the patented process.

The preceding paragraph shall not apply to:

- (1) any act for the purpose of study, research, experimentation or analysis, provided that ...

Patent Act B.E. 2522 Section 36 bis

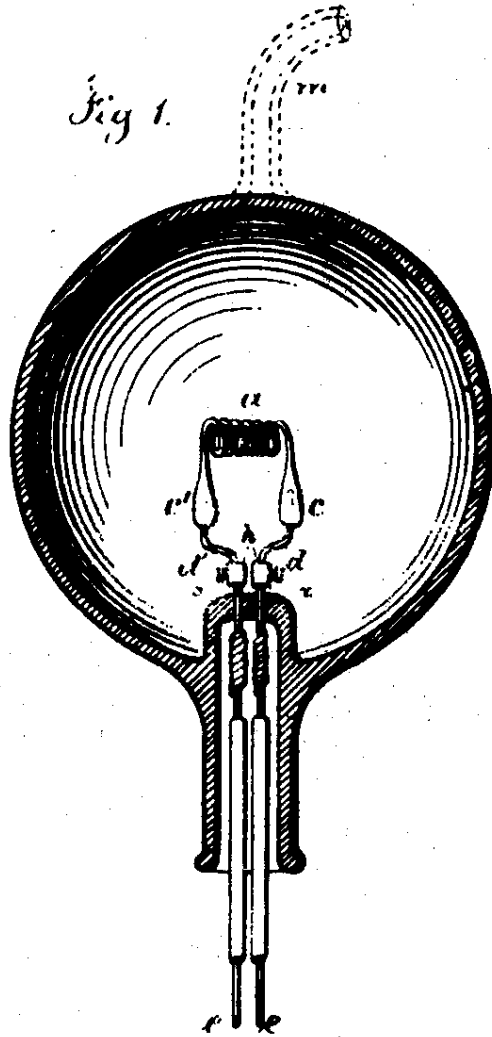
The **scope of the rights** of the patentee under Section 36 in respect of a patented invention shall be **determined by the claims**.

In determining the scope of the claimed invention, the characteristics of the invention as indicated in the description and the drawings shall be taken into account.

Patent Act B.E. 2522 Section 36 bis

The scope of protection for a patented invention shall extend to the characteristics of the invention which, although not specifically stated in the claims, in the view of a person of ordinary skill in the pertinent art, have **substantially the same properties, functions and effects** as those stated in the claims.

T.A. Edison Electric-Lamp No. 223,898 Patented in Jan 27 1880



I claim as my invention -

1. An electric lamp **for** giving light by incandescence, **consisting of** a filament of carbon of **high** resistance, **made as described**, and secured to **metallic wires**, **as set forth**.

2.....

In Germany Patent No 12174

Basic Theory of Patent Claims

To promote progress and prosperity by encouraging technological innovations, the person (or his successor in right), who **has made an invention** and who **has filed** subject to formal requirements, with a patent granting authority, **for later publication** a document **disclosing** the information necessary for a person skilled in the art, to make use of the invention and that **defines in at least one claim**, **supported** by the disclosure of the document, a **novel** and **non-obvious** combination of features of the invention useful in any field of **technology**,

is entitled to a **patent** that grants for **limited** times **the right to exclude others** from commercial exploitation of the invention **as claimed (!)** within the **territory** for which the patent granting authority has jurisdiction.

Claims

A series of numbered statements
in a patent specification, usually following the
description, that

define the invention

(it is important to define something which is
both novel and non-obvious)

and

establish the scope of the monopoly conferred by
the patent.

(it is important to define something that is of value to
the applicant).

*Most important and most difficult part of a patent
application*

Independent Claims

At least one such statement (usually the first) will be self contained - this is known as an **independent claim**.

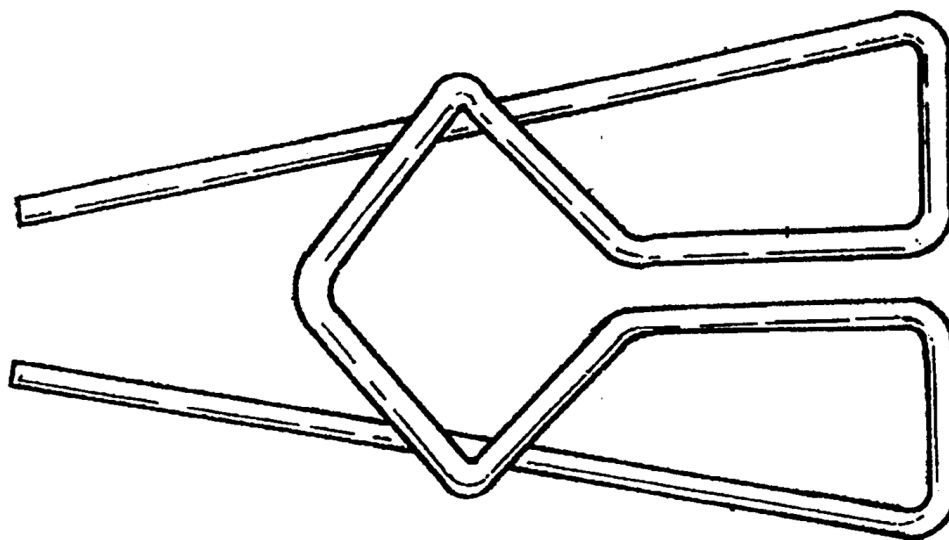
Dependent Claims serving as fallback positions

Claims that refer to previous claims
using wording such as

”... as claimed in (or as defined by, or according to)
claim 1 or claim 2...”

- these are known as **dependent claims**.

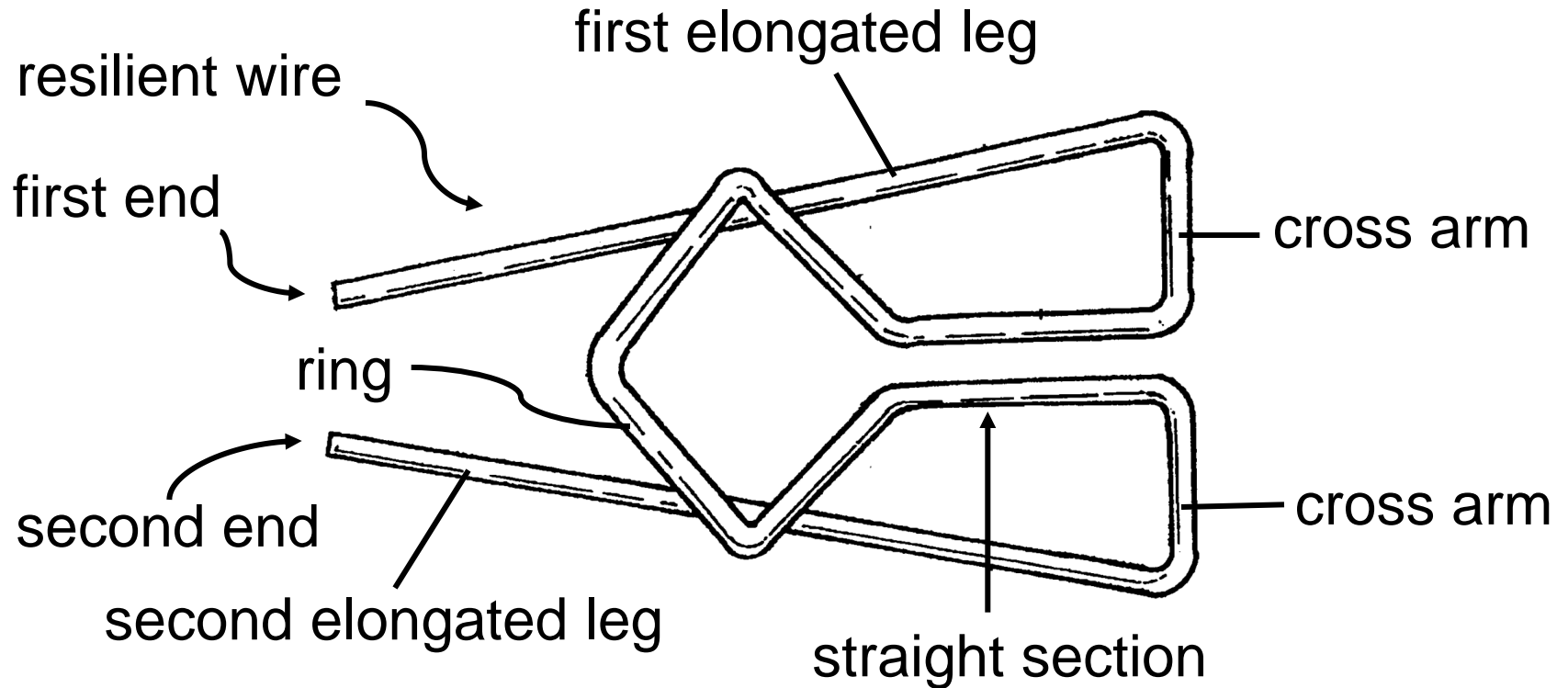
Paper Clip Protected by US Patent 5,655,266



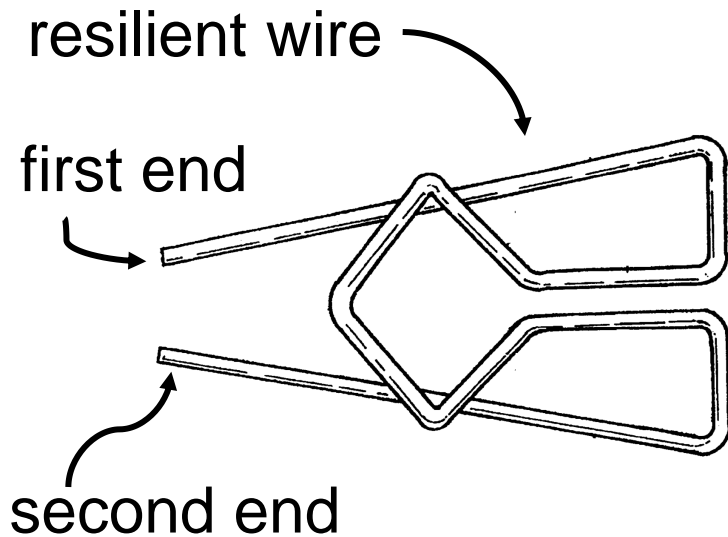
Claims

1. A **paper clip** comprising:
 - a single length of **resilient wire** having first and second ends;
 - a **ring formed** by said wire substantially midway between said first and second ends, said ring being in one plane, having a center and being unclosed with a section of first and second straight, parallel and spaced **wires emanating outward from said ring** and aligned with said center, said straight section of first and second wires having a length of approximately the maximum width of said ring;
 - first and second colinear cross arms** parallel with the plane of said ring located at the end of said straight section and formed by said first and second wires bent in opposite directions, said cross arms having a length approximately the maximum width of said ring;
 - first and second elongated legs** at the ends of said first and second cross arms, each of said legs extending from a respective one of said cross arms to **contact and overlie said ring**.

Paper Clip



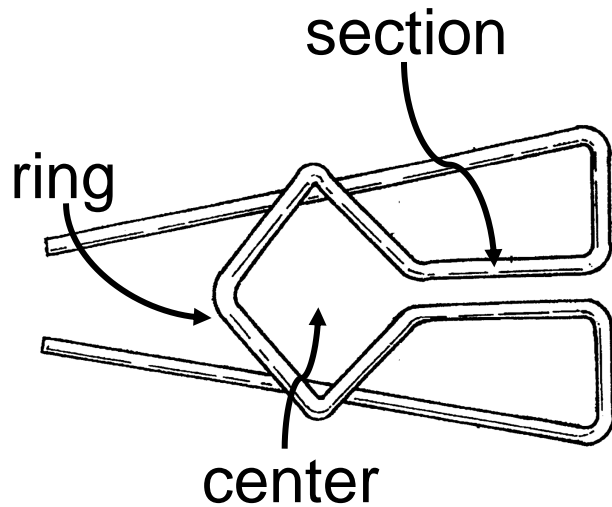
Paper Clip



Claim

1. A **paper clip** comprising:
a single length of **resilient wire**
having first and second ends;
...

Paper Clip

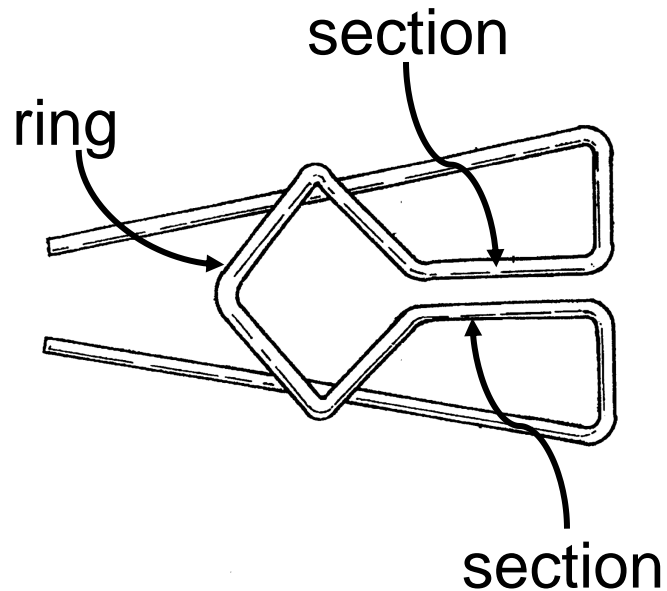


...

a **ring formed** by said wire substantially midway between said first and second ends, said ring being in one plane, **having a center** and being unclosed with **a section of** first and second straight, parallel and spaced **wires** emanating outward from said ring and aligned with said center,

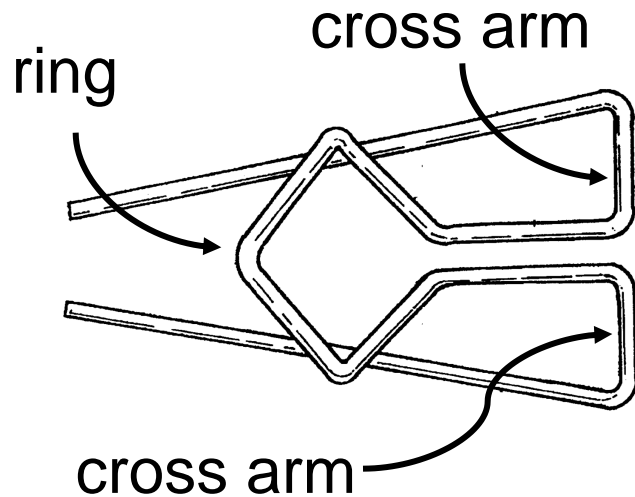
...

Paper Clip



...
said straight **section** of first
and second wires having a
length of approximately the
maximum width of said ring;
...

Paper Clip

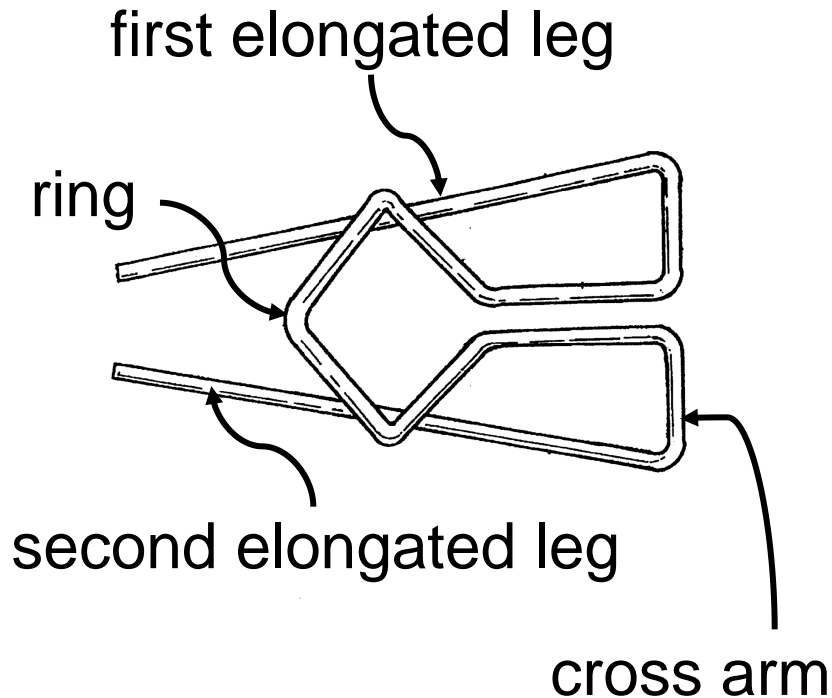


...

first and second colinear cross arms parallel with the plane of said ring located at the end of said straight section and formed by said first and second wires bent in opposite directions, said cross arms having a length approximately the maximum width of said ring;

...

Paper Clip



...

first and second elongated legs at the ends of said first and second cross arms, each of said legs extending from a respective one of said cross arms to **contact and overlie said ring.**

Dependent Claims

2. The paper clip claimed in claim 1 wherein said **ring is rectangular** and wherein each of said legs overlies two arms of said rectangle.
3. The paper clip claimed in claim 1 wherein said elongated **legs are readily movable** to overlie the opposite side of said ring, the moving of said legs from one side to the opposite side of said ring **for tightening** the spring tension of said paper clip.

Patent Claim Tree

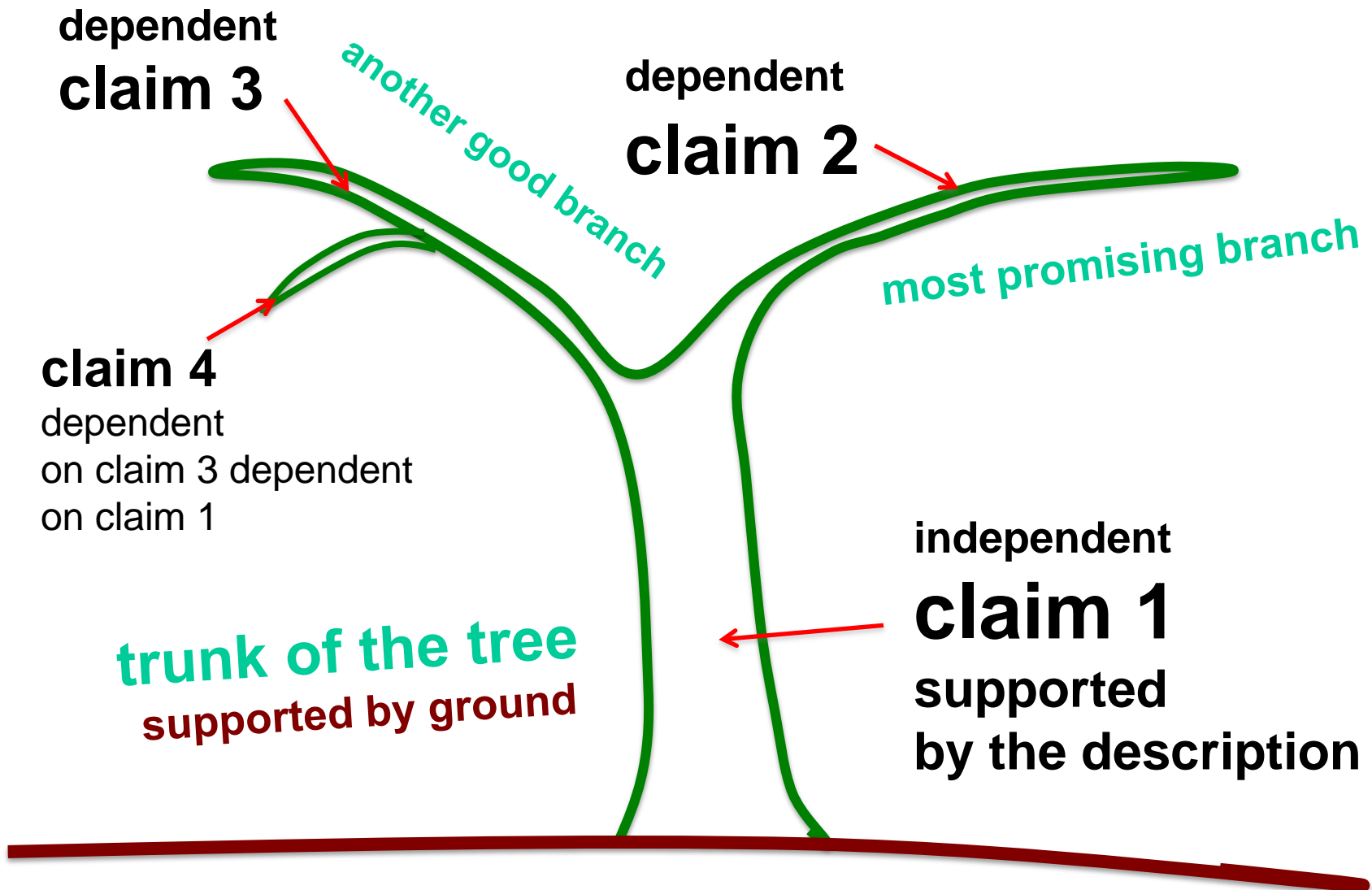


Table-edge hanger US Patent 5 594 419

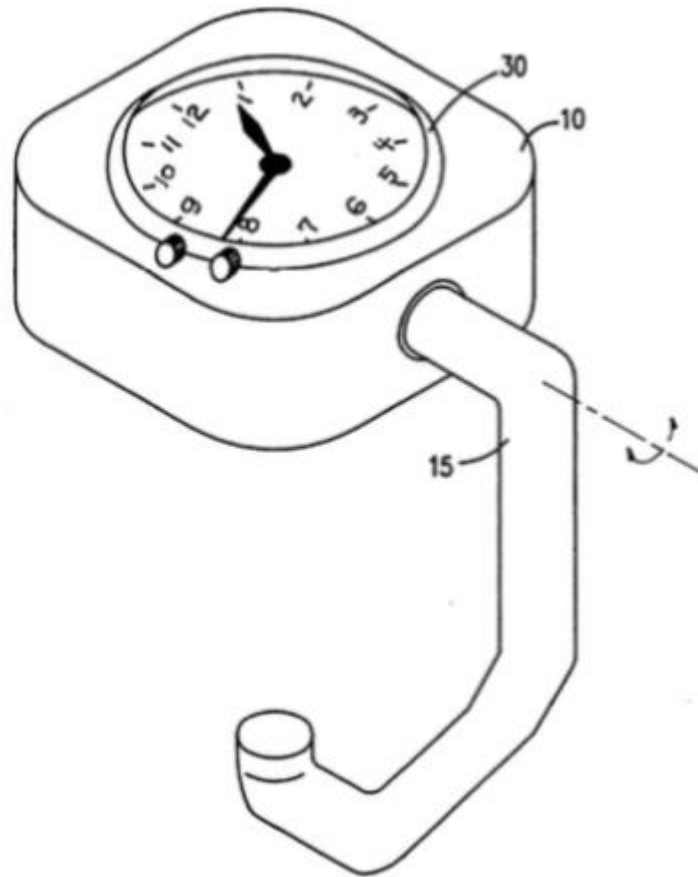


Table-edge hanger

Claims of US Patent 5 594 419

1. A table-edge hanger comprising: a base for placing against the edge of a table or a counter-top; a hook connected to one side of said base; and a decorative attachment attached to another side of said base.
2. The hanger of claim 1 wherein said hook is movably connected to said base for swinging from side to side.
3. The hanger of claim 1 wherein said decorative attachment comprises a timepiece.

First claim tree US Patent 5 594 419

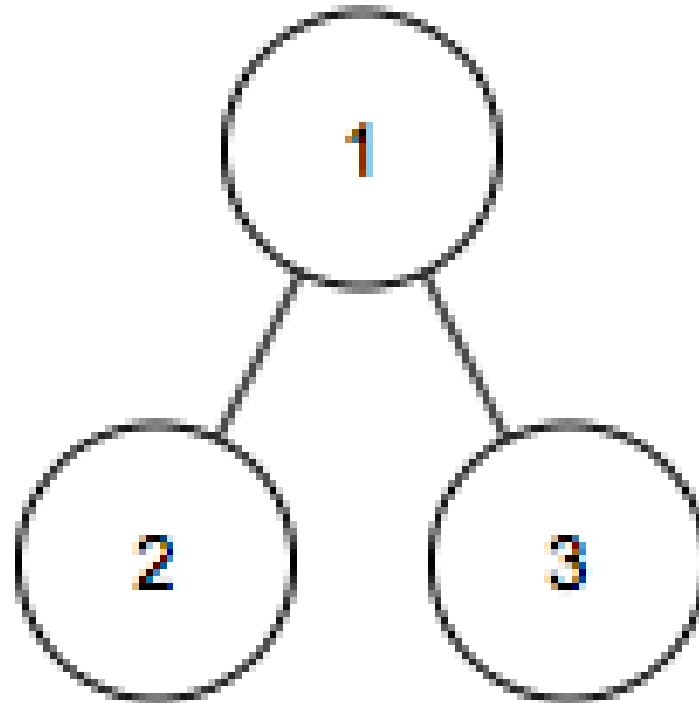


Table-edge hanger

Claims of US Patent 5 594 419

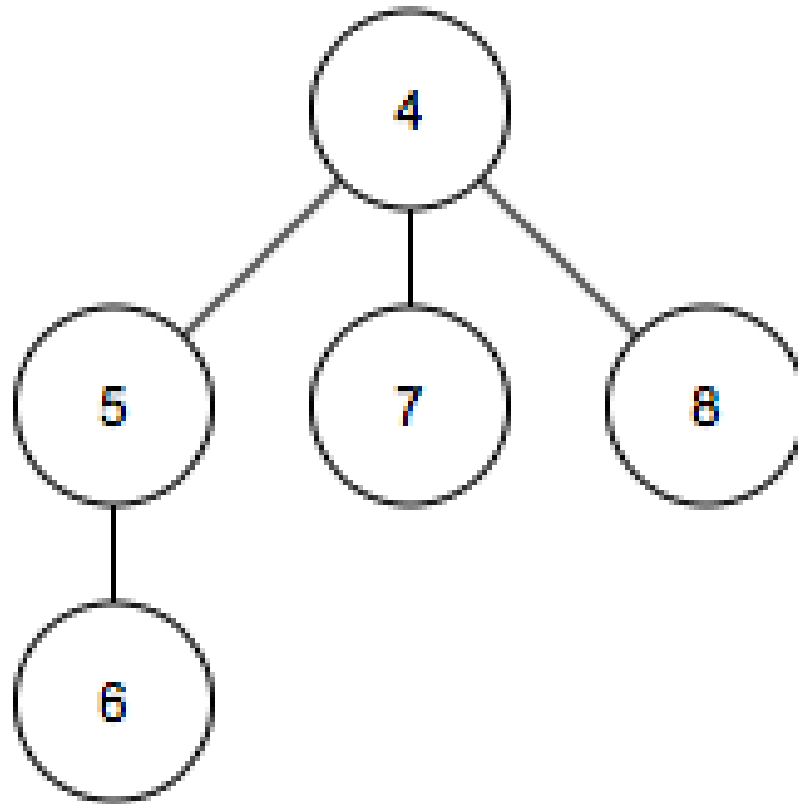
4. A table-edge hanger comprising: a base for placing against the edge of a table or a counter-top; a hook connected to one side of said base; an alarm; a first switch on another side of said base; and a second switch; wherein said first switch is turned on when a personal item is placed on said hook while said base is replaced against the edge of a table or a counter-top; wherein said first switch triggers said alarm when said personal item is removed from said hook or said base is lifted off said edge if said first switch has been turned on; wherein said alarm can be turned off by activating said second switch; wherein said alarm can be disabled by activating said second switch to prevent said alarm being triggered by said first switch when desired.

Table-edge hanger

Claims of US Patent 5 594 419

5. The hanger of claim 4 further comprising a decorative attachment.
6. The hanger of claim 5 wherein said decorative attachment comprises a timepiece.
7. The hanger of claim 4 wherein said hook is movably attached to said base.
8. The hanger of claim 4 further comprising an indicator light for indicating whether said alarm has been disabled.

Second claim tree US Patent 5 594 419



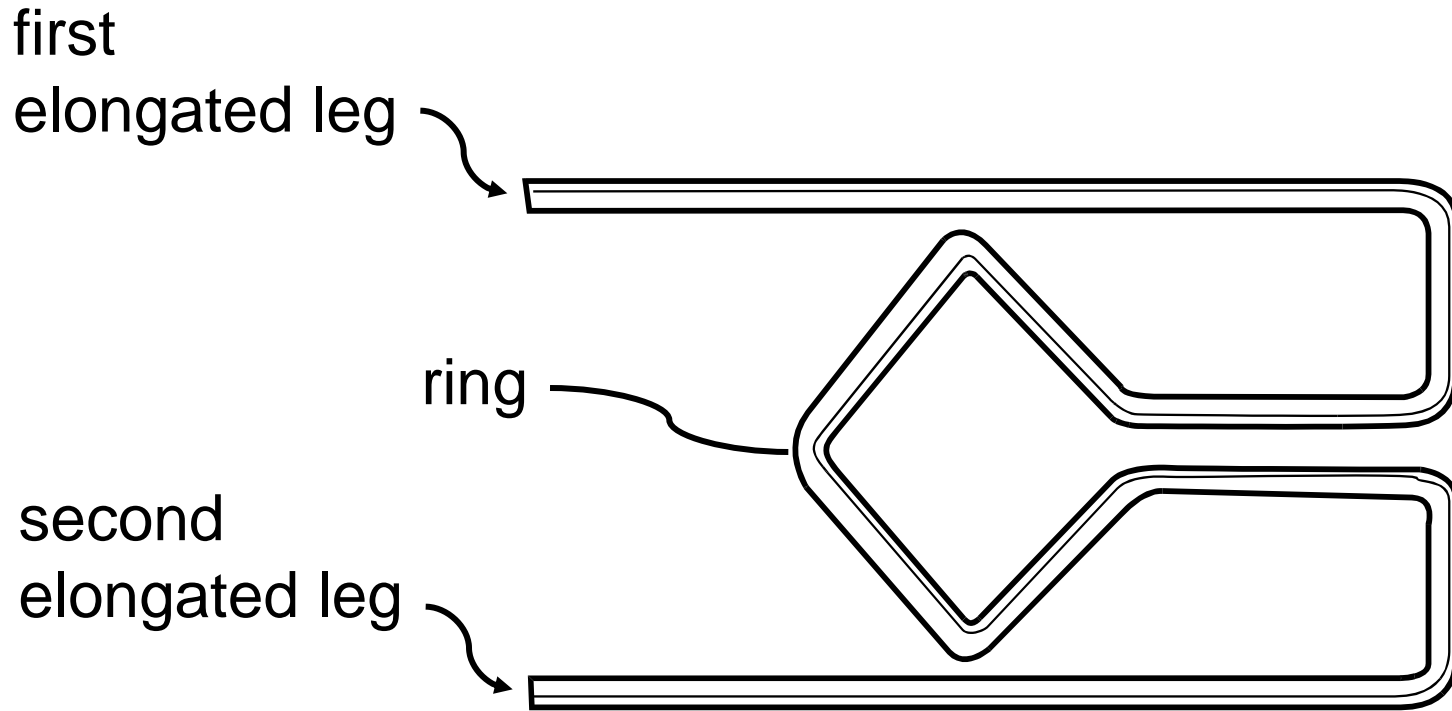
Infringement

The grant of a patent vests
certain rights in respect of an invention
as defined by the patent claims
exclusively in the patentee.

Determining Infringement

- Requires a **comparison** to be made of the allegedly infringing **item**, method or process etc with each **claim of the patent** (the scopes of which should have been determined).
- If the infringement comes within the scope of a claim: literal or textual infringement

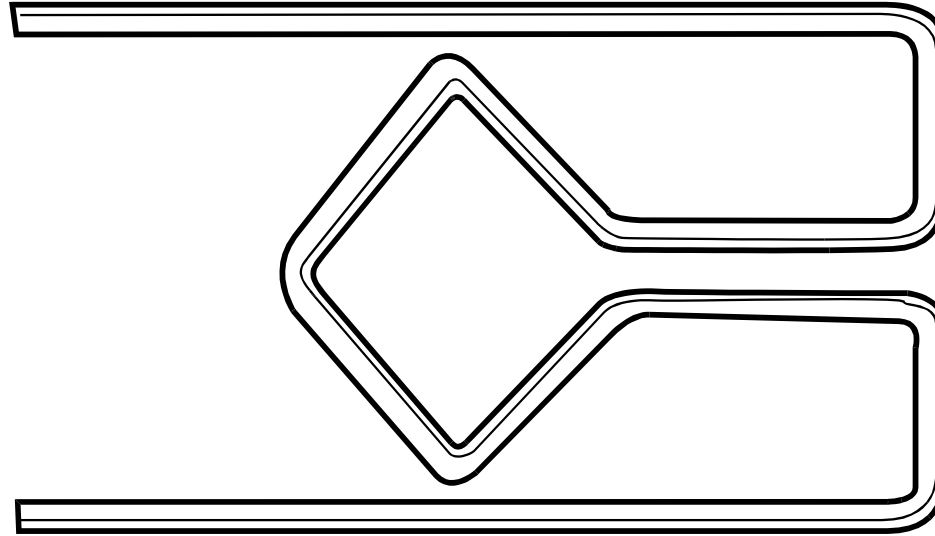
Infringement?



Claims

1. A paper clip comprising:
 - a single length of resilient wire having first and second ends;
 - a ring formed by said wire substantially midway between said first and second ends, said ring being in one plane, having a center and being unclosed with a section of first and second straight, parallel and spaced wires emanating outward from said ring and aligned with said center, said straight section of first and second wires having a length of approximately the maximum width of said ring;
 - first and second colinear cross arms parallel with the plane of said ring located at the end of said straight section and formed by said first and second wires bent in opposite directions, said cross arms having a length approximately the maximum width of said ring;
 - first and second elongated legs** at the ends of said first and second cross arms, each of said legs extending from a respective one of said cross arms to **contact and overlie said ring.**

Infringement?



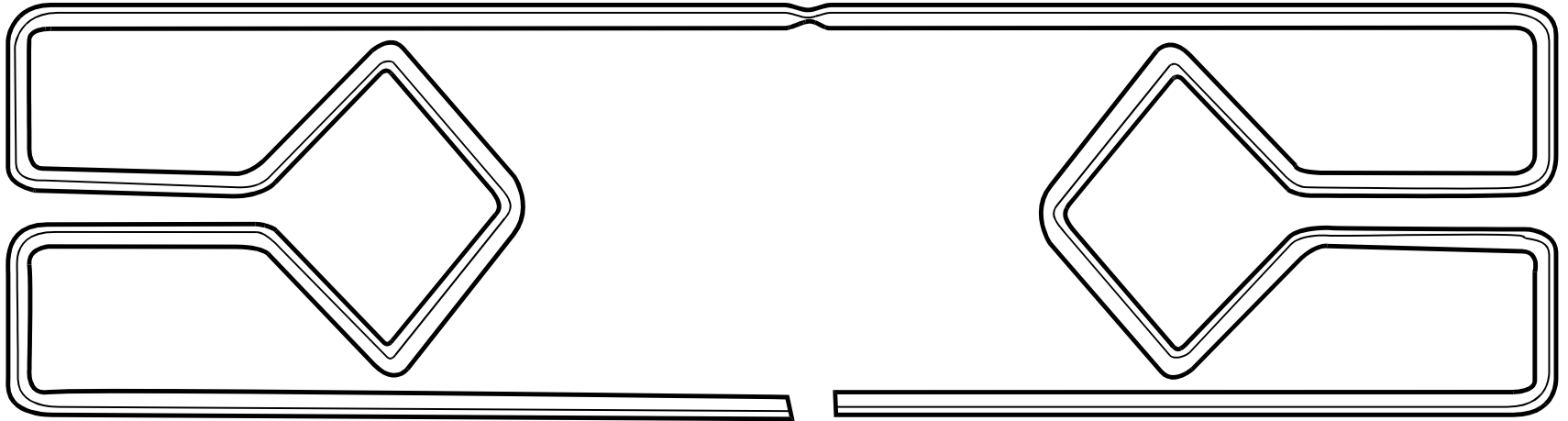
- ? ... to contact and overlie said ring.
- ? ... to overlie said ring.
- ? ... to approach said ring.

”Non-Literal” Infringement

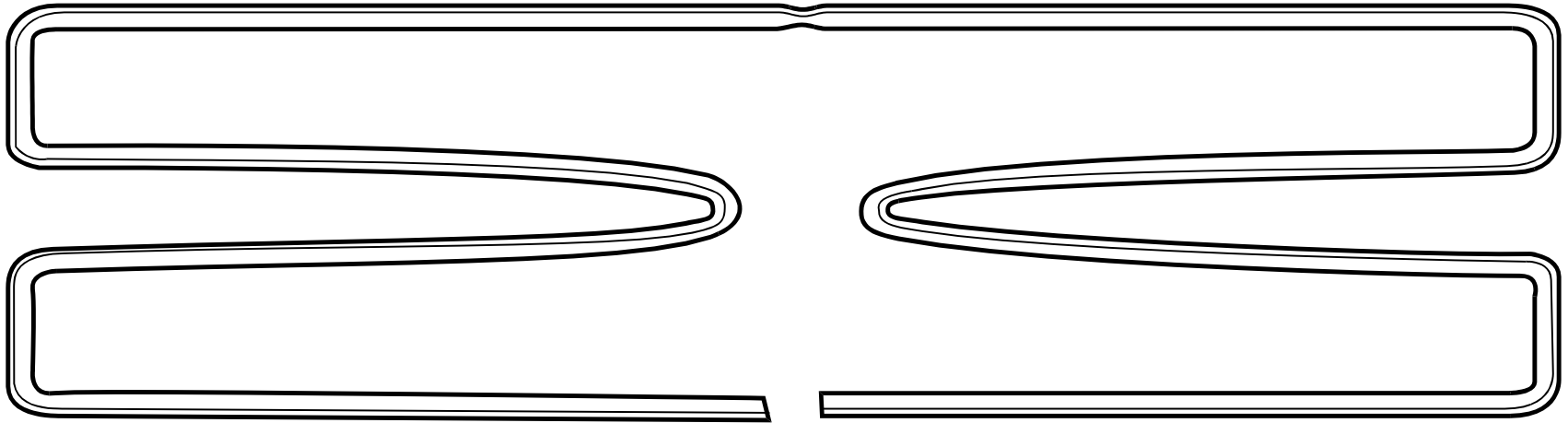
In case of **differences** between a claim and an allegedly infringing device, method or process the question becomes whether these differences are sufficient to avoid infringement. Non-literal infringement may be established e.g. under the following concepts:

- **pith and marrow**
- **substance**
- **variants analysis**
- **doctrine of equivalents**

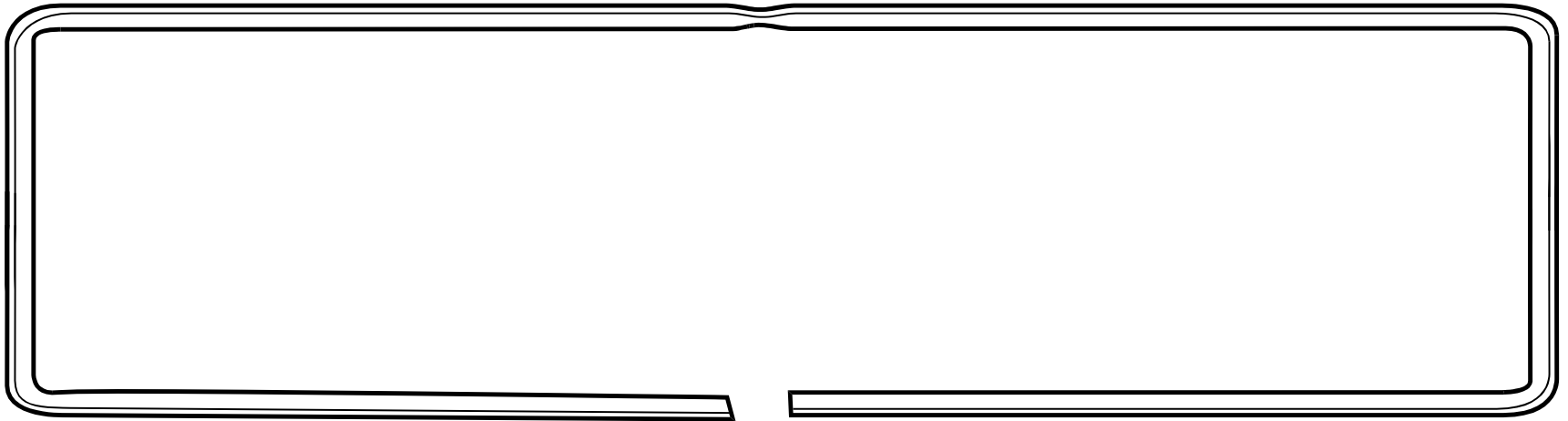
Infringement?



Infringement?



Infringement?



Contributory or Indirect Infringement

In the law of some countries
contributory or indirect infringement
exists.

Actions which do not in themselves infringe a patent claim but,
intentionally or not,
cause, **assist**, procure or otherwise result **in infringement** by another.

(e.g. special wire that can be used only for such paper clips)

Thank you for your attention!

What are your questions?