

Patent Basics

AMERICAN SOCIETY OF
MECHANICAL ENGINEERS

Presented by Laura Cruz

Christensen O'Connor Johnson Kindness^{PLLC}

206.682.8100

www.cojk.com

©2007 Christensen O'Connor Johnson Kindness^{PLLC}

Common careers for Engineers Involving Patents

- ◆ Patent Examiner-Requires a Degree in Engineering or Science
- ◆ Patent Agent-Requires a Degree in Engineering or Science and Passing the Patent Bar
- ◆ Patent Attorney-Requires a Degree in Engineering or Science, a Degree in Law, and passing the Patent Bar and a state bar

Patent Examiner

- ◆ Works for the United States Patent and Trademark Office
- ◆ Examines patent applications, performs prior art searches, prepares Office Actions
- ◆ Advances to Primary Examiner, Supervisory Examiner, etc.

Patent Agent

- ◆ Generally works at a law firm
- ◆ Drafts patent applications and responses to Office Actions
- ◆ May assist in other matters on technical issues

Patent Attorney

- ◆ Drafts patent applications, responses to Office Actions, prepares legal opinions on patentability, non-infringement, invalidity, freedom to use, etc.
- ◆ Drafts and negotiates contracts, non-disclosure agreements, licenses, etc.
- ◆ Solo practitioner, law firm, corporation

What's a Patent?

United States Patent [19]

[11] 4,237,887

Hsiao et al.

[45] Dec. 9, 1980

[54] PAPER CLIP

[76] Inventors: Oliver T. W. Hsiao; Thomas Tin, both of 2nd Fl., 108-1 Chien-Kou S. Rd., Nan-Mei Bldg., Taipei, Taiwan

2,518,179	5/1978	Quilty et al.	1A/201 R
2,508,926	10/1980	Chen	1A/244 R
2,418,749	11/1979	Patel	2A/107 R
2,476,894	5/1981	Patel	1A/244 R
4,170,000	10/1979	Cheriton	2A/107 R

[21] Appl. No.: 60,729

[22] Filed: Jul. 24, 1978

[51] Int. Cl.² B65F 1/02; A44B 21/00

[52] U.S. Cl. 24/261 R; 24/407 R; 24/417 R; 24/418 R

[53] Field of Search 24/261 R; 24 C; 241 F; 24/417 R; 475; 473; 1340; 9; 1340; 9; 1340; 9

[54] References Cited

U.S. PATENT DOCUMENTS

D. 24,875	11/1901	Merrill et al.	10/401
D. 24,514	5/1901	Thomas	10/500
664,747	10/1901	Aber	24/244 R
1,107,734	1/1934	Anderson	24/244 R
1,162,897	5/1935	Somerville	24/407 R

FOREIGN PATENT DOCUMENTS

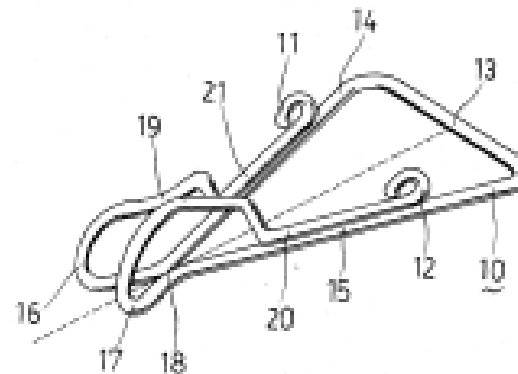
1100054	6/1950	France	1A/201 R
1488987	12/1968	France	1A/244 F

Primary Examiner—Victor N. Sakasa

[57] ABSTRACT

A paper clip formed as an essentially unitary loop is made of resilient material and comprises an isosceles triangle base portion, a first clipping portion and a second clipping portion. The first clipping portion and the second clipping portion can clip positively the documents in different directions respectively.

1 Claim, 2 Drawing Figures





PRIOR ART

Fig. 1

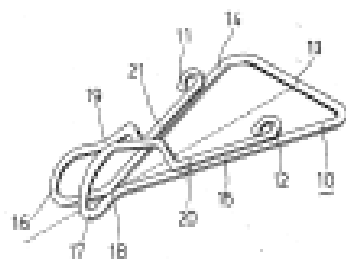


Fig. 2

PAPER CLIP

BACKGROUND OF THE INVENTION

1. FIELD OF THE INVENTION

This invention relates to a clip for fastening papers, documents or the like, and more particularly to a clip having two clipping portions of different directions, which can positively clip a relative large number of documents without causing any damage to the documents clipped thereby during the user's drawing out the paper therefrom.

2. DESCRIPTION OF THE PRIOR ART

In the treatment of office business, clip is one of the most popular stationary. Many kinds of clips have been known in the art. FIG. 1 shows one of the oldest and still widely used conventional clips which comprises two U-shaped arms positioned approximately on the same plane so as to form a clamping portion. This kind of clip has the following drawbacks:

Since the U-shaped arms of the conventional clip are positioned on the same plane approximately, the number of sheets of paper to be clipped thereby is limited. In other words, if the quantity of paper is beyond the limit of the maximum elasticity representing at the joint point of the material used to fabricate the clip, the recovering elasticity of the U-shaped arms of the clip will be yielded and the clip can neither fasten positively the paper any more nor return to its original position even if the paper is drawn out by the user. This drawback causes the user great inconvenience in the office work. Furthermore, two ends 14, 15 of the conventional clip are in a pointed shape, hence, it tears the paper clipped thereby easily when the user draws out the paper.

To overcome the last drawback of the above-mentioned conventional clip, a new kind of clip made of plastics has appeared in the market in recent years. Undoubtedly, the plastic clip avoids tearing the paper clipped thereby, but it fails to provide a desirable clamping effect due to the low recovering elasticity of the plastics and the number of the paper to be clipped thereby is restricted as a result.

SUMMARY OF THE INVENTION

Accordingly, it is a primary object of the present invention to provide a clip of considerable elasticity which is suitable for clamping not only a large number of paper but also few sheets of paper without tearing the paper.

It is another object of the present invention to provide a clip including two clipping portions of different directions, wherein one of the clipping portions thereof is adapted to clip a large number of paper while another one is intended for clipping few sheets of paper.

According to this invention, a clip formed as an essentially unitary loop is made of resilient material and has an isosceles triangle base portion, a pair of bent connecting portions extending apart outwardly from one angle of the triangle base portion and bending upwardly and reversely until they meet each other at a joint so as to form a first clipping portion, and two end portions bent to be essentially parallel and tightly connect to the isosceles arms of the triangle base portion respectively so as to form a second clipping portion.

The various features of novelty which characterize the invention are pointed out with particularity in the claims annexed thereto and forming a part of this specification. For a better understanding of the invention, its

opening advantages, and specific objects obtained by its use, reference should be made to the accompanying drawings and descriptive matter in which there is illustrated and described a preferred embodiment of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a conventional clip. FIG. 2 is a diagrammatic perspective view of a preferred embodiment in accordance with the present invention.

DETAILED DESCRIPTION OF THE PREPARED EMBODIMENT

Referring now to FIG. 2, there is shown a preferred embodiment of the present invention. The clip of the preferred embodiment being taken in the form of a unitary loop is made of resilient materials such as metal wire and comprises an isosceles triangle base portion 10 having a base arm 13, and two isosceles arms 14, 15 extending from two ends of the base arm 13 respectively. Each two isosceles arms 14, 15 connect each other at a first connecting point 16 positioned on a line which is perpendicular to the base arm 13 and passes through the middle point of said base arm 13 (shown as a broken line in FIG. 2). After passing through the first connecting point 16 the isosceles arms 14, 15 extend apart outwardly and bent upwardly to act as a pair of clamping jaws 18, 17, and then, bent reversely approaching to connect each other at an another point 19 which is positioned on an imaginary line perpendicular to the said broken line as shown in FIG. 2 so as to form a first clipping portion.

A pair of end portions 20, 21 extending from the clamping jaws 18, 17 is provided with a horizontal arm 22, 21 which are contained closely and parallel to the isosceles arms 14, 15 of the triangle base portion 10 respectively so as to form a second clipping portion. The free end of said two end portions 20, 21 is wrapped to form a small loop 23, 24 so that the damage done to the paper may be minimized during the user's drawing out the paper.

Since a suitable space is provided between the two clamping jaws 18 and 17, a relative large number of documents can be held together by the first clipping portion. The horizontal arms 20, 21 connect closely with the isosceles arms 14, 15 of the triangle base portion 10 so that the second clipping portion is adapted to clip few sheets of paper. Therefore, the user may decide whether to use the first clipping portion or the second clipping portion in accordance with the actual need.

While the described embodiment represents the preferred form of the present invention, it is to be understood that modifications will occur to those skilled in the art without departing from the spirit of the invention. The scope of the invention is therefore to be determined solely by the appended claims.

What is claimed is:

1. A paper clip made of a single piece of metal wire comprising:

an isosceles triangle base portion having a base arm and two isosceles arms extending from two ends of said base arm respectively and connecting each other at a first connecting point;

a first clipping portion having two clamping jaws extending apart outwardly from said first connecting point of said isosceles arms and bending up-

3

wardly and reversly approaching to contact each other at a second connecting point whereby to permit a relative number of documents to be clipped therebetween; and

a second clipping portion including two horizontal arms contact closely and parallel to said two isosceles arms respectively so as to clip less sheets of documents.

2. A paper clip as claimed in claim 1, wherein a free end of each said horizontal arm is warped to form a small loop so that any damages done to the documents clipped thereto will be avoided during the user's drawing out the documents.

4

3. A paper clip as claimed in claim 1, wherein said first clipping portion and said second clipping portion are so arranged that paper can be clipped thereto in different directions simultaneously.

4. A paper clip as claimed in claim 1, wherein said second connecting point of said clamping jaws is positioned on an imaginary line perpendicular to said first connecting point of said isosceles arms of said triangle base portion.

5. A paper clip as claimed in claim 4, wherein said first connecting point is positioned on an imaginary line which is perpendicular to said base arm of said triangle base portion and passes through the middle point of said base arm.

* * * * *

5
10
15
20
25
30
35
40
45
50
55
60
65

What's the Invention?

- ◆ The claims not the detailed description or the drawings
- ◆ A claim is one sentence long and includes the elements of the invention

Why have Patents at all?

◆ The Congress shall have power...

To Promote the Progress of Science and Useful Arts, by securing for limited times to Authors and Inventors the exclusive right to their respective Writings and Discoveries.

--U.S. Constitution, Art. I, Sec. 8

What do you get from a Patent?

- ◆ The right to exclude others from making, using, selling, or importing the patented invention in the United States for a period of 20 years from the filing date of the application
- ◆ It does not give you the right to “practice” the invention

What Can be Patented?

- ◆ Anything Under the Sun Made by Man
- ◆ Congress said these are Inventions can be patented:
 - Machines
 - Articles of manufacture
 - Compositions of matter
 - Processes (i.e., methods)
 - Improvements in any of these four categories

What Can't be Patented

- ◆ Laws of nature, physical phenomena and scientific principles
- ◆ Abstract mental ideas and mental processes

How do you get a Patent?

◆ Novel

- A novel invention is one that is not identical to anything else known anywhere in the world

◆ Non-obvious

- An invention must not be obvious to a person having ordinary skill

◆ Utility

- An invention must have a credible use

How do you get a Patent?

- ◆ A patent must describe the invention
- ◆ A patent must enable one of ordinary skill to make and use the invention
- ◆ A patent must include the “best mode” for practicing the invention
- ◆ A patent must particularly point out and distinctly claim the invention

How do you get a Patent?

◆ Examination

- Notice of Allowance or Office Action
- Remarks or amend the claims

◆ Final Office Action, Notice of Allowance

- If finally rejected, abandon, reconsideration, appeal, request for continued examination, or file continuation application

How do you get a Patent?

- ◆ Prevent competition
- ◆ License the patent

What is Infringement?

- ◆ Making, Using, Selling, or Importing the patented invention
- ◆ Contribute to someone infringing
- ◆ Actively induce someone to infringe

What you get from someone that infringes

- ◆ Damages (i.e., money that you lost)
- ◆ Injunctive relief (stops the infringing activity)

How to Avoid Infringement?

- ◆ Prove in court or in the US patent office that the invention is not novel or is obvious or that the patent is defective in some way
- ◆ Design around
- ◆ Licensing