

**UNITED STATES
PATENT AND TRADEMARK OFFICE**



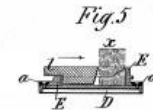
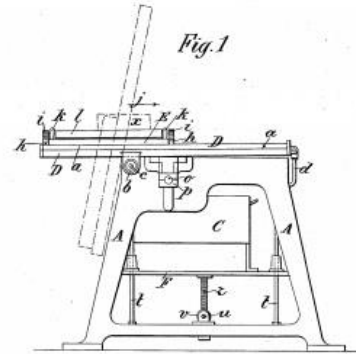
The Patent Office and Its Publications

Robert Berry, Manager
Tiffany Mair, Librarian
Patent & Trademark Resource Center Program
United States Patent and Trademark Office
October 17, 2017

Today's Presentation

- I. The Modern Utility Patent Document and Its Architecture
- II. The Historic Collections
- III. Other Publications
- IV. Conclusion and Questions

(No Model.)
J. V. GALICHER.
BOOKBINDER'S GLUING MACHINE.
No. 567,742. Patented Sept. 15, 1896.



Witnesses:
J. H. Brown
Peter A. Cross

Inventor:
Jules Victor Galicher
by *Henry Converse*
H. C. Converse, N.Y.

I. The Modern Utility Patent Document and Its Architecture

A. Front Page Information

B. The Specification, Drawings, and Claims

C. USPTO's Patents Full-Text Database



US009701149B2

(12) **United States Patent**
Huotari

(10) **Patent No.:** **US 9,701,149 B2**
(45) **Date of Patent:** **Jul. 11, 2017**

(54) **BOOKBINDING DEVICE HAVING A GLUE CARTRIDGE AND A GLUE CARTRIDGE RECEIVING UNIT**

(58) **Field of Classification Search**
CPC B42C 9/00; B42C 9/0012; B42C 9/0043
(Continued)

(71) Applicant: **Mapping Kommandittiyhtiö L. Huotari, Espoo (FI)**

(56) **References Cited**
U.S. PATENT DOCUMENTS

(72) Inventor: **Isakki Huotari, Espoo (FI)**

4,376,008 A * 3/1983 Lauri et al.
5,221,112 A * 6/1993 Holmberg B42C 5/00
2005/0152771 A1* 7/2005 Huotari B42C 9/0018
412/37
412/37

(73) Assignee: **Mapping Kommandittiyhtiö L. Huotari (FI)**

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 350 days.

FOREIGN PATENT DOCUMENTS
IT EP 1876031 A1 * 1/2008 B42C 9/0012
IT EP 2133213 A1 * 12/2009 B42C 9/00
(Continued)

(21) Appl. No.: **14/375,635**

(22) PCT Filed: **Feb. 4, 2013**

(86) PCT No.: **PCT/IB2013/050927**
§ 371 (c)(1),
(2) Date: **Jul. 30, 2014**

OTHER PUBLICATIONS
International Search Report for PCT Application PCT/IB2013/050927, EPO, Apr. 18, 2013.

(87) PCT Pub. No.: **WO2013/114344**
PCT Pub. Date: **Aug. 8, 2013**

Primary Examiner—Kyle Grabowski

(65) **Prior Publication Data**
US 2015/0023766 A1 Jan. 22, 2015

(50) **Foreign Application Priority Data**
Feb. 4, 2012 (EP) 12153960

(51) **Int. Cl.**
B42C 9/00 (2006.01)
B05C 1/00 (2006.01)
B05C 1/08 (2006.01)

(52) **U.S. Cl.**
CPC **B42C 9/0012** (2013.01); **B05C 1/003** (2013.01); **B05C 1/006** (2013.01); **B05C 1/0808** (2013.01);

(Continued)

(57) **ABSTRACT**
A glue cartridge (130) comprises a glue tank (101), a rotatable glue spreading roller (104) connected to the glue tank, which is arranged directly below the glue tank (101) and at least one rotation means (106, 107) usable from outside the glue cartridge (130) for rotating the glue spreading roller (104). The glue spreading roller (104) of the glue cartridge is designed so that the form of the glue spreading roller (104) prevents glue from escaping from the glue tank (101) when the glue spreading roller (104) is in place and takes glue from the glue tank (101) when the glue spreading roller (104) is rotated. A block (1360) of sheets to be bound to form a book is set in a bookbinding device (1300), and glue is spread on the spine (1362) of the block (1360) in such a way that glue is obtainable from an exchangeable glue cartridge (130) by using a receiving unit (150) for the glue cartridge (130).

12 Claims, 10 Drawing Sheets

A Utility Patent grants a limited monopoly to exclude others from making, using, or selling an invention

Whoever invents or discovers any **new** and **useful**

process, machine, manufacture, or composition of matter,

or any new and useful **improvement** thereof,

may obtain a patent therefor, subject to the conditions and requirements of this title.

35 U.S.C. §101.

(12) **United States Patent** **Huotari**

(54) **BOOKBINDING DEVICE HAVING A GLUE CARTRIDGE AND, A GLUE CARTRIDGE RECEIVING UNIT**

(71) Applicant: **Maping Kommandiittiyhtiö L. Huotari, Espoo (FI)**

(72) Inventor: **Iisakki Huotari, Espoo (FI)**

(73) Assignee: **Maping Kommandiittiyhtiö L. Huotari (FI)**

A granted Utility Patent document includes Front Page information & a Specification of the disclosed invention

Front Page:

- **Identifies the document**
- **Identifies the inventor(s)**
- **Identifies the invention**
- **Provides classification information**
- **Includes an abstract and a drawing**

Specification:

- **Discloses technological know-how with sufficient specificity to allow a person having ordinary skill in the art to make and use the invention**
- **References drawings of the invention**
- **Concludes with and supports the inventors' claims**

Much of the Front Page information includes recognizable information such as Patent Number and Inventor Name:



US009701149B2

(12) **United States Patent**
Huotari

(10) **Patent No.:** **US 9,701,149 B2**

(45) **Date of Patent:** **Jul. 11, 2017**

(54) **BOOKBINDING DEVICE HAVING A GLUE CARTRIDGE AND, A GLUE CARTRIDGE RECEIVING UNIT**

(58) **Field of Classification Search**
CPC B42C 9/00; B42C 9/0012; B42C 9/0043
(Continued)

(71) Applicant: **Maping Kommandiittiyhtiö L. Huotari**, Espoo (FI)

(56) **References Cited**

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(73) Assignee: **Maping Kommandiittiyhtiö L. Huotari** (FI)

2005/0152771 A1 * 7/2005 Huotari B42C 9/0018
412/37

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 350 days.

FOREIGN PATENT DOCUMENTS

(21) Appl. No.: **14/375,635**

IT EP 1876031 A1 * 1/2008 B42C 9/0012
IT EP 2133213 A1 * 12/2009 B42C 9/00

(Continued)



There is also some technical bibliographic information on US Patents, specifically INIDS and Kind Codes



US009701149B2

INIDs

(12) **United States Patent**
Huotari

INIDs

(10) **Patent No.:** **US 9,701,149** **B2**
(45) **Date of Patent:** **Jul. 11, 2017**

KIND CODE

(54) **BOOKBINDING DEVICE HAVING A GLUE CARTRIDGE AND, A GLUE CARTRIDGE RECEIVING UNIT**

(58) **Field of Classification Search**
CPC B42C 9/00; B42C 9/0012; B42C 9/0043
(Continued)

(71) Applicant: **Maping Kommandiittiyhtiö L. Huotari, Espoo (FI)**

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4,376,008 A 3/1983 Lauri et al.
5,221,112 A * 6/1993 Holmberg B42C 5/00
412/37
2005/0152771 A1 * 7/2005 Huotari B42C 9/0018
412/37

(73) Assignee: **Maping Kommandiittiyhtiö L. Huotari (FI)**



INIDs & Kind Codes

INIDs

- **Internationally agreed Numbers for the Identification of (bibliographic) Data**
- **Permit identification of relevant information without a knowledge of document language**
- **On US Patent since 08/04/1970**
- **Based on World Intellectual Property Organization (WIPO) Standard ST. 9**
- **See Manual of Patent Examining Procedure (MPEP) §901.05(b)**

KIND CODES

- **Are a letter—and in some instances also a number—used to distinguish the kind of patent document (utility patent, plant patent, design patent, application, etc.)**
- **On US Patents since 01/02/2001**
- **Are based on WIPO Standard ST. 16**
- **See MPEP §901.04(a)**

Front Page information includes Classification information and a Field of Search memorializing the Examination

(51) **Int. Cl.**

B42C 9/00 (2006.01)
B05C 1/00 (2006.01)
B05C 1/08 (2006.01)

(52) **U.S. Cl.**

CPC *B42C 9/0012* (2013.01); *B05C 1/003*
(2013.01); *B05C 1/006* (2013.01); *B05C*
1/0808 (2013.01);

(Continued)

(58) **Field of Classification Search**

CPC *B42C 9/00*; *B42C 9/0012*; *B42C 9/0043*
(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,376,008	A	3/1983	Lauri et al.	
5,221,112	A *	6/1993	Holmberg <i>B42C 5/00</i> 412/37
2005/0152771	A1 *	7/2005	Huotari <i>B42C 9/0018</i> 412/37

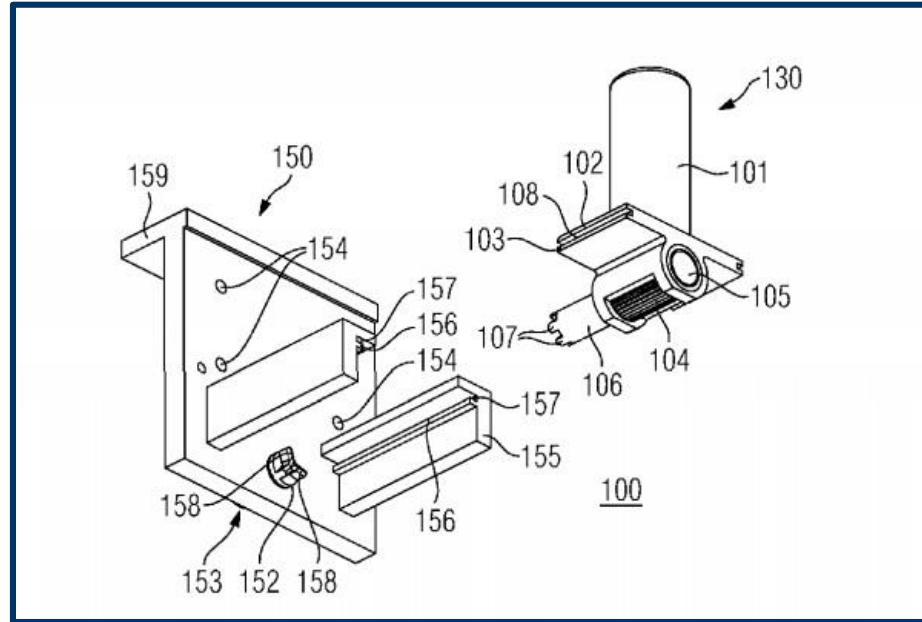
FOREIGN PATENT DOCUMENTS

Front Page information also includes an Abstract, providing the gist of the technological know-how disclosed, and one of the Drawings

(57)

ABSTRACT

A glue cartridge (130) comprises a glue tank (101), a rotatable glue spreading roller (104) connected to the glue tank, which is arranged directly below the glue tank (101) and at least one rotation means (106, 107) usable from outside the glue cartridge (130) for rotating the glue spreading roller (104). The glue spreading roller (104) of the glue cartridge is designed so that the form of the glue spreading roller (104) prevents glue from escaping from the glue tank (101) when the glue spreading roller (104) is in place and takes glue from the glue tank (101) when the glue spreading roller (104) is rotated. A block (1360) of sheets to be bound to form a book is set in a bookbinding device (1300), and glue is spread on the spine (1362) of the block (1360) in such a way that glue is obtainable from an exchangeable glue cartridge (130) by using a receiving unit (150) for the glue cartridge (130).



A US Patent Document will also include a Specification that would inform a person having ordinary skill in the art as to how to make or use the invention.

The Specification will:

- Describe the problem the invention solves
- Describe applications for the invention
- Reference the drawings
- Support the claims

1 BOOKBINDING DEVICE HAVING A GLUE CARTRIDGE AND, A GLUE CARTRIDGE RECEIVING UNIT

TECHNICAL FIELD

5

The invention is related to the field of bookbinding and more particularly, to a bookbinding unit having an exchangeable glue cartridge mounted in a receiving unit such that a block of sheets to be bound to form a book is set in a bookbinding device and glue is spread on the spine of the block in such a way that glue is obtainable from an exchangeable glue cartridge mounted in the glue cartridge receiving unit.

10

15

BACKGROUND INFORMATION

The demand for hot melt glue binding, i.e. perfect binding, equipment, such as of the type shown in international patent applications WO 03/064169 A or U.S. Pat. No. 5,376,008 A of the present applicant, has increased considerably in recent times. This is partly a result of the rapid development of digital printing technology. Using this type of equipment it is possible to produce books in short runs, or even in individual copies, in a way that is economically reasonable.

20

25

Patent documents typically include several drawings on numbered sheets

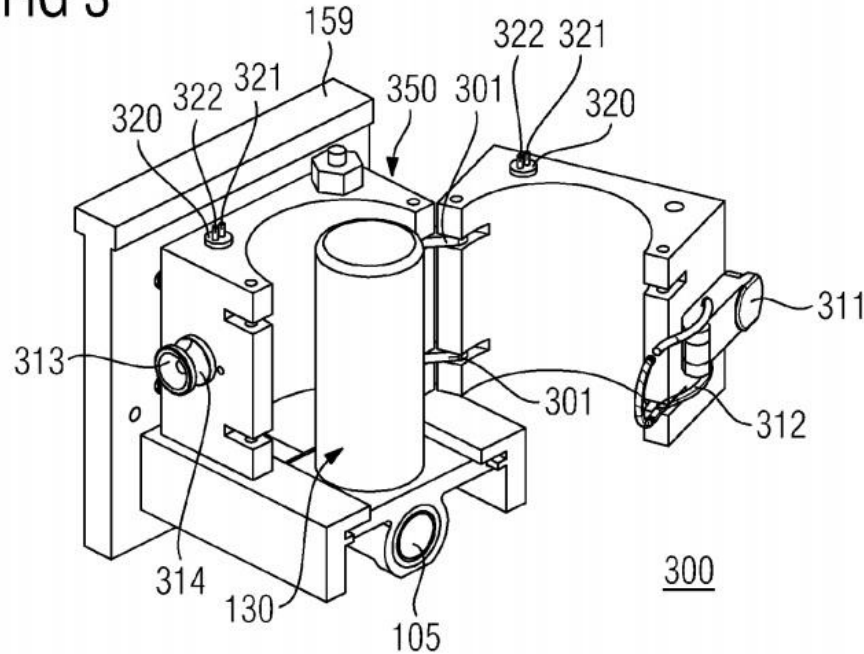
U.S. Patent

Jul. 11, 2017

Sheet 2 of 10

US 9,701,149 B2

FIG 3



The Claims precisely define the scope of the protection granted by law

The invention claimed is:

1. A bookbinding device (1300) in which a block (1360) of sheets to be bound to form a book is placeable, and with the aid of which glue is spreadable on the spine (1362) of the block (1360), the bookbinding device (1300) comprising:
 - a glue cartridge (130) comprising:
 - a glue tank (101) that is essentially in the form of a protrusion from a platform (110) of the glue cartridge and where at least two sides of the platform (110) have a fastening device (102, 103, 108) to allow the shape-limited fastening of the glue cartridge (130);
 - a rotatable glue spreading roller (104) connected to the glue tank, which is arranged directly below the glue tank (101); and
 - at least one rotation means (105, 106, 107) usable from outside the glue cartridge (130) for rotating the glue spreading roller (104);

Patents documents can be accessed using the Full Text (PatFT) available at www.uspto.gov under the Quick Links menu:

The screenshot shows the USPTO website homepage. At the top left is the USPTO logo and the text "UNITED STATES PATENT AND TRADEMARK OFFICE". To the right are links for "About Us", "Jobs", "Contact Us", and "MyUSPTO". Below this is a search bar with the text "Search uspto.gov" and a magnifying glass icon. A navigation menu below the search bar includes "Patents", "Trademarks", "IP Policy", and "Learning and Resources". A green "Quick links" button with a dropdown arrow is also present. The main content area has a blue background with the heading "I'm looking for..." and a search bar with the text "Search uspto.gov" and a "Search" button. Below the search bar is the text "For example, 'trademark abandonment', 'EFS-Web', or 'provisional patent application'". To the right is a "Help Topic" section with a list of links: "General information concerning patents", "Patent forms", "Trademark basics", "Financial Manager", and "Fees and payment". At the bottom are two white buttons: "Learn about the process" and "Fees and payment".

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Learn about the process Fees and payment



PatFT is the first choice in Quick Links under the Patents column:

The screenshot displays the USPTO website interface. At the top left is the 'uspto' logo and 'UNITED STATES PATENT AND TRADEMARK OFFICE'. On the top right are navigation links for 'About Us', 'Jobs', 'Contact Us', and 'MyUSPTO', along with a search bar for 'uspto.gov'. Below the header is a main navigation bar with categories: 'Patents', 'Trademarks', 'IP Policy', and 'Learning and Resources'. A 'Quick links' dropdown menu is open, showing two columns of links. The 'Patents' column includes: 'PatFT | AppFT Patent search' (with 'PatFT' highlighted in pink), 'EFS-Web | Forms Patent filing', 'Private PAIR | Public PAIR Filing status', 'Pay maintenance fees Pay or look up maintenance fees', 'PTAB Patent Trial and Appeal Board', and 'Search assignment | Record'. The 'Trademarks' column includes: 'TESS Search trademark database', 'TEAS Trademark filing', 'TSDR Status, documents, and certificates', 'TTAB | ESTTA | TTABVUE Trademark Trial and Appeal Board', and 'Search assignment | Record assignment Search recorded assignment and record ownership changes'. On the left side of the page, there is a search area with the text 'I'm looking for...' and a search bar containing 'Search uspto.gov'. Below the search bar, it says 'For example, "trademark abandonment", "EFS-Web", or "provisional pater...'. At the bottom left, there is a link that says 'Learn about the process'.



PatFT provides both Structured and Advanced search options

USPTO PATENT FULL-TEXT AND IMAGE DATABASE

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Data current through September 12, 2017..

Query [\[Help\]](#)

Term 1: in Field 1:

AND

Term 2: in Field 2:

Select years [\[Help\]](#)

- All Fields
- Title
- Abstract
- Issue Date
- Patent Number
- Application Date
- Application Serial Number
- Application Type
- Applicant Name
- Applicant City
- Applicant State
- Applicant Country
- Applicant Type
- Assignee Name
- Assignee City
- Assignee State
- Assignee Country
- International Classification
- Current CPC Classification
- Current CPC Classification Class

Patents
When searching for specific

only by Issue Date, Patent Number, and Current US Classification.
Patent numbers must be seven characters in length, excluding commas, which are optional.

The Advanced search uses manually entered Field Codes

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[Advanced](#)
[Pat Num](#)
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Data current through September 12, 2017..

Query [\[Help\]](#)

Examples:

t1l/(tennis and (racquet or racket))

isd/1/8/2002 and motorcycle

in/newmar-julie

Select Years [\[Help\]](#)

1976 to present [full-text] ▼

Patents from 1790 through 1975 are searchable only by Issue Date, Patent Number, and Current Classification (US, IPC, or CPC).
When searching for specific numbers in the Patent Number field, patent numbers must be seven characters in length, excluding commas, which are optional.

Field Code	Field Name	Field Code	Field Name
PN	Patent Number	IN	Inventor Name
ISD	Issue Date	IC	Inventor City
TTL	Title	IS	Inventor State
ABST	Abstract	ICN	Inventor Country
ACLM	Claim(s)	AANM	Applicant Name
SPEC	Description/Specification	AACI	Applicant City
CCL	Current US Classification	AAST	Applicant State
CPC	Current CPC Classification	AACO	Applicant Country
CPCL	Current CPC Classification Class	AAAT	Applicant Type
ICL	International Classification	LREP	Attorney or Agent
APN	Application Serial Number	AN	Assignee Name
APD	Application Date	AC	Assignee City

Many of the available fields correspond to Front Page information

	Field Name	Advanced Search Field Code	Example	Searchable from 1790 to 1975?
Patent Number	Patent Number	PN	PN/9701149	YES
Patent Date	Issue Date	ISD	ISD/7/11/2017	YES
Title of Invention	Title	TTL	TTL/bookbinding	NO
Applicant	Applicant Name	AANM	AANM/Kommandii\$	NO
Inventor	Inventor Name	IN	IN/Huotari	NO
Assignee	Assignee Name	AN	AN/Kommandii\$	NO
Cooperative Patent Classification	Current CPC Classification	CPC	CPC/B42C9/0012	YES
Abstract	Abstract	ABST	ABST/bookbinding	NO

A particularly effective search methodology is to use a CPC Classification Symbol to search within a CPC Class or Subgroup

CPC Symbols for Subgroups associated with US 9,701,149:

B42C 9/0012

B05C 1/003

B05C 1/006

B05C 1/0808

B05C 1/0813

B05C 1/0821

B42C 9/00

B42C 9/0018

B42C 9/0043

Classification Searching:

- Allows you to comprehensively search an area of technology, including documents published prior to 1976.
- Frees you from many of the limitations of searching using technical terms.

The CPC Scheme can be accessed via Quick Links:

The screenshot shows the USPTO homepage with the 'Quick links' dropdown menu open. The menu lists various services under 'Patents' and 'Trademarks'. Under 'Patents', the 'Classification' link is highlighted with a pink box. Other links include PatFT, AppFT, EFS-Web, Private PAIR, Public PAIR, Pay maintenance fees, PTAB, Search assignment, and MPEP. Under 'Trademarks', links include TESS, TEAS, TSDR, TTAB, Search assignment, TMEP, and Updates and announcements.

The screenshot shows the 'Search Patent Classification Systems' page. The 'CPC' dropdown menu is open, and the 'Scheme' option is selected. The page title is 'Search Patent Classification Systems'. The 'Access Entire CPC Scheme' text is highlighted with a pink box, and an arrow points to the 'CPC' dropdown. Another arrow points to the 'Scheme' option in the dropdown menu.



The broadest level of CPC organization is the section level

The screenshot displays the USPTO Cooperative Patent Classification (CPC) website. The header includes the USPTO logo and navigation links for 'About Us', 'Jobs', and 'Contact Us'. Below the header, the title 'Cooperative Patent Classification' is shown, followed by a navigation bar with links for 'CSD Home', 'CPC', 'USPC', 'Classification Revision', 'Advanced Search', 'Contacts', and 'Help'. The main content area features a search bar with the text 'Search Symbol' and 'Enter Symbol', and a 'Go' button. Below the search bar, a list of CPC sections is displayed, each with a letter and a description:

Section	Description
CPC	COOPERATIVE PATENT CLASSIFICATION
A	HUMAN NECESSITIES
B	PERFORMING OPERATIONS; TRANSPORTING
C	CHEMISTRY; METALLURGY
D	TEXTILES; PAPER
E	FIXED CONSTRUCTIONS
F	MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING
G	PHYSICS
H	ELECTRICITY
Y	GENERAL TAGGING OF NEW TECHNOLOGICAL DEVELOPMENTS; GENERAL TAGGING OF CROSS-SECTIONAL TECHNOLOGIES SPANNING OVER SEVERAL SECTIONS OF THE IPC; TECHNICAL SUBJECTS COVERED BY FORMER USPC CROSS-REFERENCE ART COLLECTIONS [XRACs] AND DIGESTS

The footer of the website includes the USPTO logo, the text 'UNITED STATES PATENT AND TRADEMARK OFFICE', and several navigation links: 'BROWSE BY TOPIC' (with a link to 'Patents'), 'ABOUT THIS SITE' (with a link to 'Accessibility'), 'USPTO BACKGROUND' (with a link to 'Federal Activity Inventory Reform Act'), and 'FEDERAL GOVERNMENT' (with a link to 'Regulations.gov'). A circular seal of the United States Patent and Trademark Office is also visible in the bottom right corner of the footer.

- Reading relevant subsections of the CPC Scheme is one way a researcher can quickly get up-to-speed on an area of technology.
- Because CPC is highly nuanced, a researcher will usually need to look at several relevant subsections.

CPC Hierarchy—B42C 9/0012

- Section (one letter)
- Class (two digits)
- Subclass (one letter)
- Group (one to three digits)
- Subgroups (two to four digits)

B	Performing Operations (Etc.)
B42	Bookbinding (Etc.)
B42C	Bookbinding
B42C9/	Applying glue or adhesive peculiar to bookbinding
/0006	• by applying adhesive to a stack of sheets
/0012	•• with a roller

Note that the subgroup 0012 falls within the subgroup 0006.

The CPC Scheme includes definitions and cross-references.

Search Symbol

e.g. A23F 5/04

Scheme ▼



Outline ON

Color ON

Curly Brackets ON

References ON

B42C 7/006	. {Folding the edges of covers}
B42C 7/007	. {Reinforcing corners of covers}
B42C 7/008	. {Conveying means between operation stations}
B42C 7/009	. {Decorating book covers}
D <input type="checkbox"/> B42C 9/00	Applying glue or adhesive peculiar to bookbinding
D <input type="checkbox"/> B42C 9/0006	. {by applying adhesive to a stack of sheets}
<input checked="" type="checkbox"/> <u>B42C 9/0012</u>	. . {with a roller (B42C 9/0043 takes precedence)}
<input type="checkbox"/> B42C 9/0018	. . . {for binding stacks of sheets one at the time}
B42C 9/0025 {and subsequently applying a cover (casing-in B42C 11/00)}
<input type="checkbox"/> B42C 9/0031	. . . {with continuous flow of stacks of sheets}
B42C 9/0037 {and subsequently applying a cover (casing-in B42C 11/00)}
<input type="checkbox"/> B42C 9/0043	. . {manually (bookbinding presses B42C 13/003)}
B42C 9/005	. . . {and applying a cover (casing-in B42C 11/00)}



Using a CPC Symbol Classification search to search a subclass of technology from 1790 to present


Query [\[Help\]](#)


CPC/B42C9/0012


Select Years [\[Help\]](#)


1790 to present [entire database] ▼


23 [4,677,005](#)  [Adhesive application process](#)  1987


24 [4,662,979](#)  [Gluing apparatus](#)


25 [4,588,470](#)  [Apparatus for applying adhesive to stacked sheets in bookbinding machines](#)


26 [4,582,421](#)  [Copying machine with rotary sorter and adhesive binding apparatus](#)


27 [4,376,008](#)  [Apparatus for binding sheets of paper](#)




28 [4,332,212](#)  [Applicator for normally viscous substances](#)


29 [4,310,576](#)  [Adhesive-applying apparatus and method](#)


30 [4,249,984](#)  [Gumming apparatus](#)


31 [4,117,800](#)  [Device for spreading glue](#)


32 [4,106,148](#)  [Method of binding papers](#)


33 [3,310,028](#)  [118/227](#) 118/259 118/261 118/602  1978  1967


34 [3,103,689](#)  [401/2](#) 401/183 401/208 401/219


35 [3,030,916](#)  [118/252](#) 118/261


36 [2,868,160](#)  [118/202](#) 118/259


37 [2,824,541](#)  [118/692](#) 118/202 156/578 412/21 412/37


38 [2,726,629](#)  [412/37](#) 118/200 118/252 118/259 118/261 156/578 412/900


39 [2,720,665](#)  [412/8](#) 118/221 118/244 412/37 412/6


40 [2,523,860](#)  [281/21.1](#) 412/37 412/8 493/333


41 [1,855,207](#)  [118/110](#) 118/244 412/37


42 [1,530,292](#)  [118/70](#) 118/224


43 [1,410,498](#)  [118/238](#) 118/243 118/244 493/334



44 [1,009,922](#)  [118/238](#) 118/258

45 [1,005,486](#)  [118/238](#) 118/253 118/264

46 [861,258](#)  [118/238](#) 118/244 118/258 227/14

47 [567,742](#)  [118/238](#) 118/247

48 [436,363](#)  [118/238](#) 118/248 118/258

49 [239,780](#)  [118/238](#) 118/267 131/300  1881

Results are displayed in HTML with a link (Images) to access the published patent document

USPTO PATENT FULL-TEXT AND IMAGE DATABASE



(32 of 49)

United States Patent
Axelrod

4,106,148
August 15, 1978

Method of binding papers

Abstract

A process is provided for binding a plurality of papers arranged together in signatures using an adhesive without requiring the spines of the signatures to be trimmed in order to allow adhesive applied from a single source to contact all of the papers to be bound. A linear array of apertures is cut into each of a plurality of papers. Each paper

United States Patent [19] 4,106,148
Axelrod [45] Aug. 15, 1978

[54] METHOD OF BINDING PAPERS

[76] Inventor: Herbert R. Axelrod, 211 W. Sylvania Ave., Neptune, N.J. 07753

[21] Appl. No.: 745,872

[22] Filed: Nov. 29, 1976

[51] Int. Cl.² B42C 19/00

[52] U.S. Cl. 11/1 AD; 270/32

[58] Field of Search 11/1 AD, 1 R; 270/32; 281/21 R

[56] References Cited

U.S. PATENT DOCUMENTS

2,914,318 11/1959 McGarvey et al. 270/32

3,179,967 4/1965 Yohn et al. 11/1 AD

FOREIGN PATENT DOCUMENTS

2,325,937 12/1974 Fed. Rep. of Germany 11/1 AD

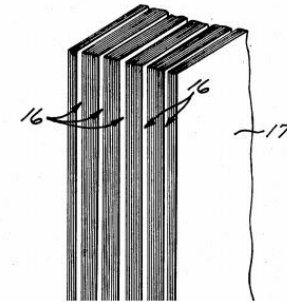
Primary Examiner—Stephen C. Pellegrino

Attorney, Agent, or Firm—Fulwider, Patton, Rieber, Lee & Utecht

[57] ABSTRACT

A process is provided for binding a plurality of papers arranged together in signatures using an adhesive without requiring the spines of the signatures to be trimmed in order to allow adhesive applied from a single source to contact all of the papers to be bound. A linear array of apertures is cut into each of a plurality of papers. Each paper is folded back on itself to form a signature having two layers of paper with the apertures in each layer at least partially aligned. The signatures are positioned side by side and adhesive is applied concurrently to the spines of all of the signatures, thereby introducing adhesive into the apertures and bonding all of the layers of paper to each other. A backing is contacted with the spines of the signatures to form a cover, thereby providing a bound publication.

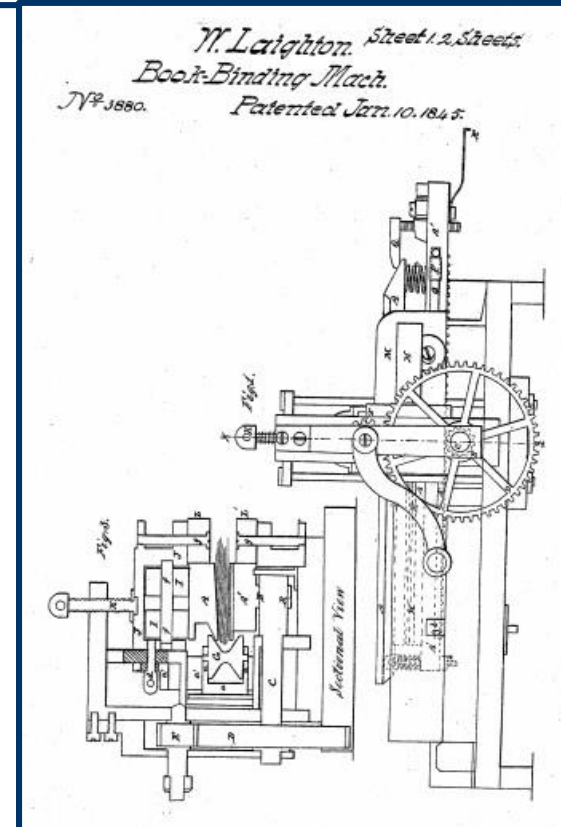
12 Claims, 9 Drawing Figures



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II. The Historic Collections

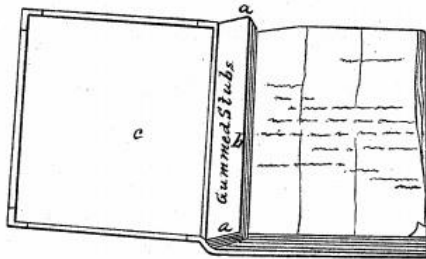
- A. Patents granted under the 1790 and 1793 Patent Acts
- B. The X-Patents
- C. Patents granted under the 1836 Act
- D. Additional improvement patents, design patents, and plant patents



It is fascinating to see how U.S. Patent documents have changed over the decades:

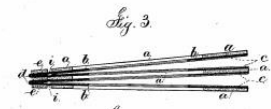
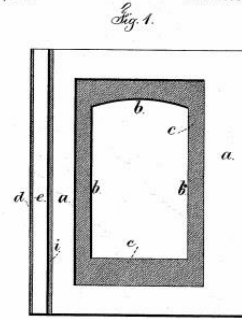
1853

H. L. Smith.
Temporary Binder.
N^o 9,770. Patented Jun. 7, 1853.



1875

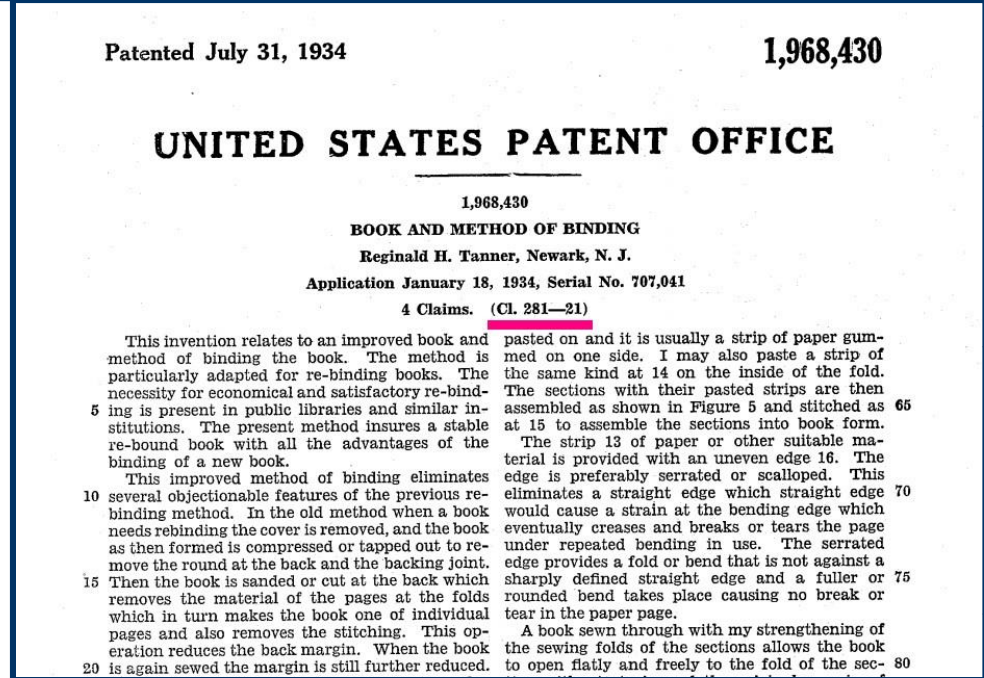
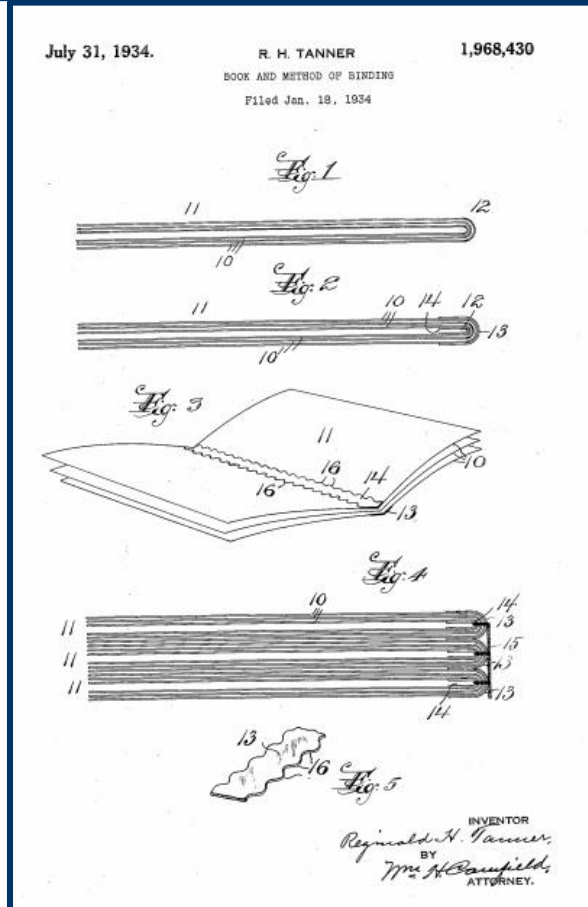
H. T. ANTHONY.
PHOTOGRAPH-ALBUM.
No. 170,042. Patented Nov. 16, 1875.



Witnesses,
Charles Smith
Richard Smith
Inventor,
Hony. S. Anthony
J. L. M. Small atty

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Basic classification information (US Class and Subclass) was added to patent documents in the early 1930s:



US Patent Classification 281 is Books, Strips, and Leaves, then Subclass 21 (now 21.1) indicates Binding. Note that USPC is a static collection.



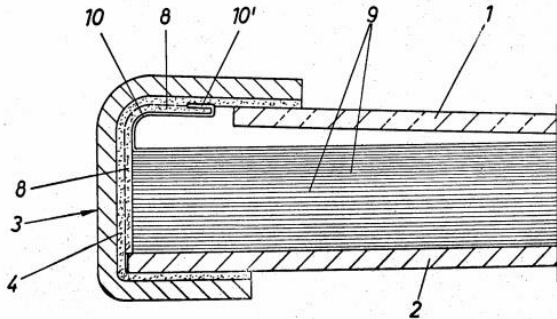
Additional classification information began appearing on patent documents in the early 1970s:

United States Patent [19] [11] **3,833,244**
Heimann [45] **Sept. 3, 1974**

[54] **ADHESIVE BINDING COVER** 6,711,263 2/1969 Netherlands..... 281/21 R
 [76] Inventor: **Egon Heimann**, Falkenberg 61, 56, Wuppertal-Elberfeld, Germany
 [22] Filed: **Apr. 2, 1973**
 [21] Appl. No.: **346,887**
Related U.S. Application Data
 [63] Continuation of Ser. No. 97,412, Dec. 3, 1970, abandoned.
 [52] U.S. Cl. **281/21 R, 281/29**
 [51] Int. Cl. **B42d 1/04**
 [58] Field of Search 281/21 R, 29
References Cited
UNITED STATES PATENTS
 3,188,114 6/1965 O'Brien et al. 281/21 R
 3,210,093 10/1965 Steidinger 281/21 R
FOREIGN PATENTS OR APPLICATIONS
 1,282,002 11/1968 Germany..... 281/21 R
3 Claims, 8 Drawing Figures

Primary Examiner—Jerome Schnall
Attorney, Agent, or Firm—Spencer & Kaye

ABSTRACT
 Adhesive binding folder for binding loose sheets with two outside enclosing covers, joined to each other by a back strip which carries a double self adhesive layer against which the narrow rear edges of the bound inner sheets are positioned. The layer includes a removable strip to expose the adhesive and thereby adhere to the sheets. An inner protective sheet for the purpose of attachment penetrates with a narrow margin into the contact interface of the self adhesive layer. Said sheet serves to cover the self-adhesive layer laid bare by pulling out individual sheets.



281/21.1; 281/29
 B42D 3/002 (20130101)
 B42D 3/00 (20060101); B42d 001/04 ()
 ;281/21R,29

Up-to-date classification information can be found in the HTML results.

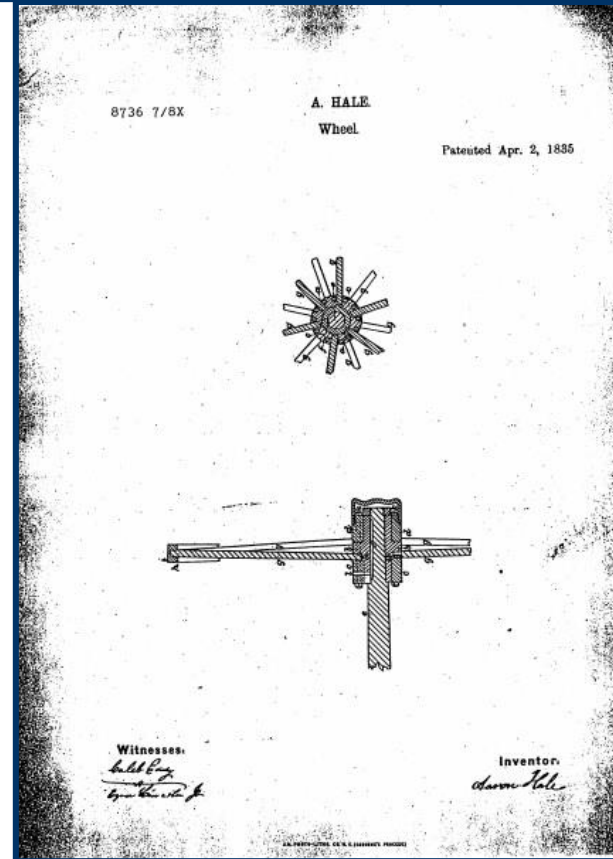


The following are some of the major Nineteenth Century Statutes that impacted the Patent Office and its Publications:

- **Patent Act of 1790.** Act of April 10, 1790, 1 Stat. 109.
- **Patent Act of 1793,** Act of February 21, 1793, 1 Stat. 318.
- **Patent Act of 1836,** Act of July 4, 1836, 5 Stat. 117.
- **Design Patent Act of 1842,** Act of August 29, 1842, 5 Stat. 543.
- **1870 Trademark Act,** Act of July 8, 1870, 16 Stat. 198.

In the early years of the Republic, Congress passed two Acts pursuant to U.S. Const. Art I, § 8, cl. 8

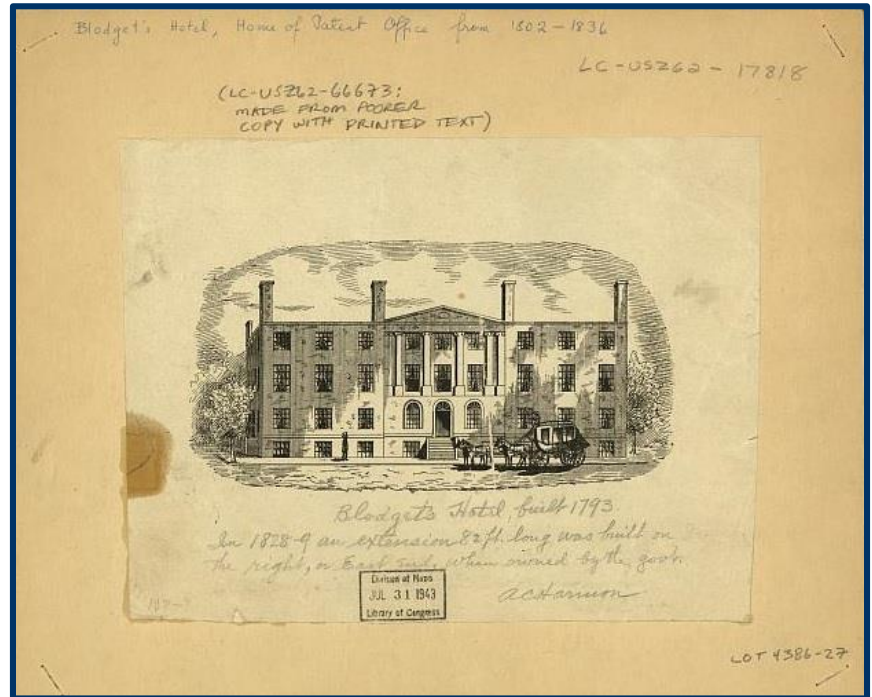
- Patent Act of 1790
 - Substantive examination for Usefulness
 - Examined by the Patent Board
- Patent Act of 1793
 - No substantive examination
 - Merits of a patent were resolved when the courts resolved Infringement Claims



Wheels and Axels, Aaron Hale of Boston, Mass.

Patents under the 1790 and 1793 Acts were arranged by name and date and were called "Name and Date Patents."

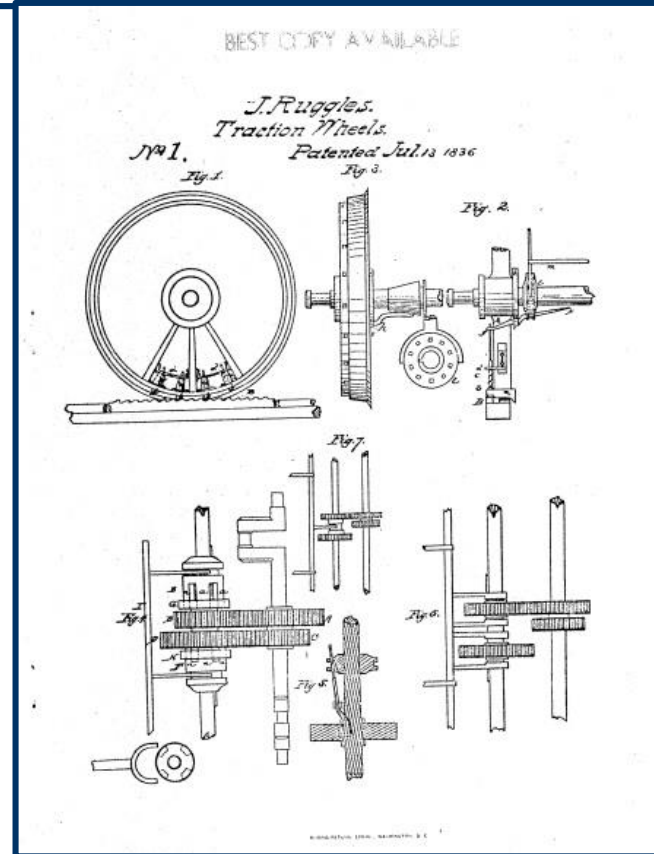
- A December 15, 1836 fire destroyed the Name and Date Patents.
- The collection was partially reconstructed pursuant to the 1837 Patent Act.
- The Collection was retrospectively renumbered as "X-Patents."
- X-Patents often consist of partial records.



The Patent Act of 1836 created a modern Patent Office and required examination of patents for Novelty and Utility

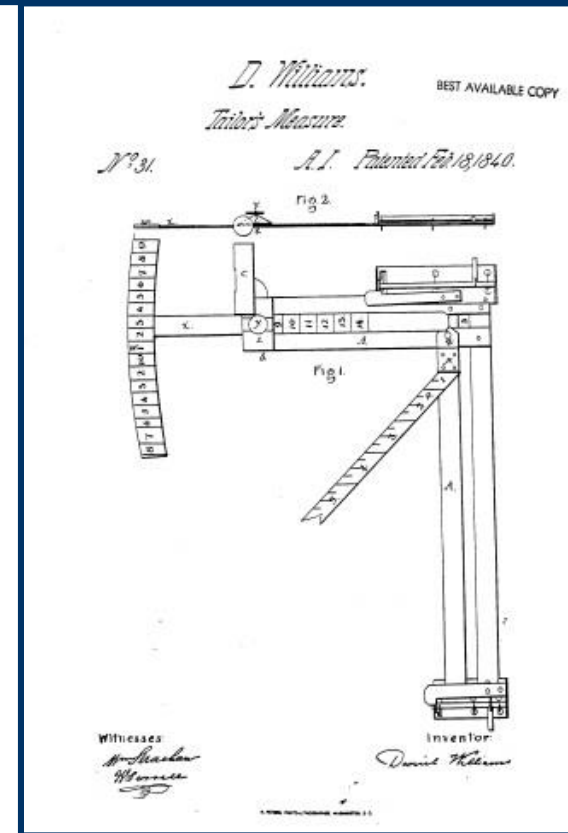
In addition to numbered utility patents, the 1836 Act authorized:

- Reissue Patents
- Additional Improvement Patents
- Patent Caveats

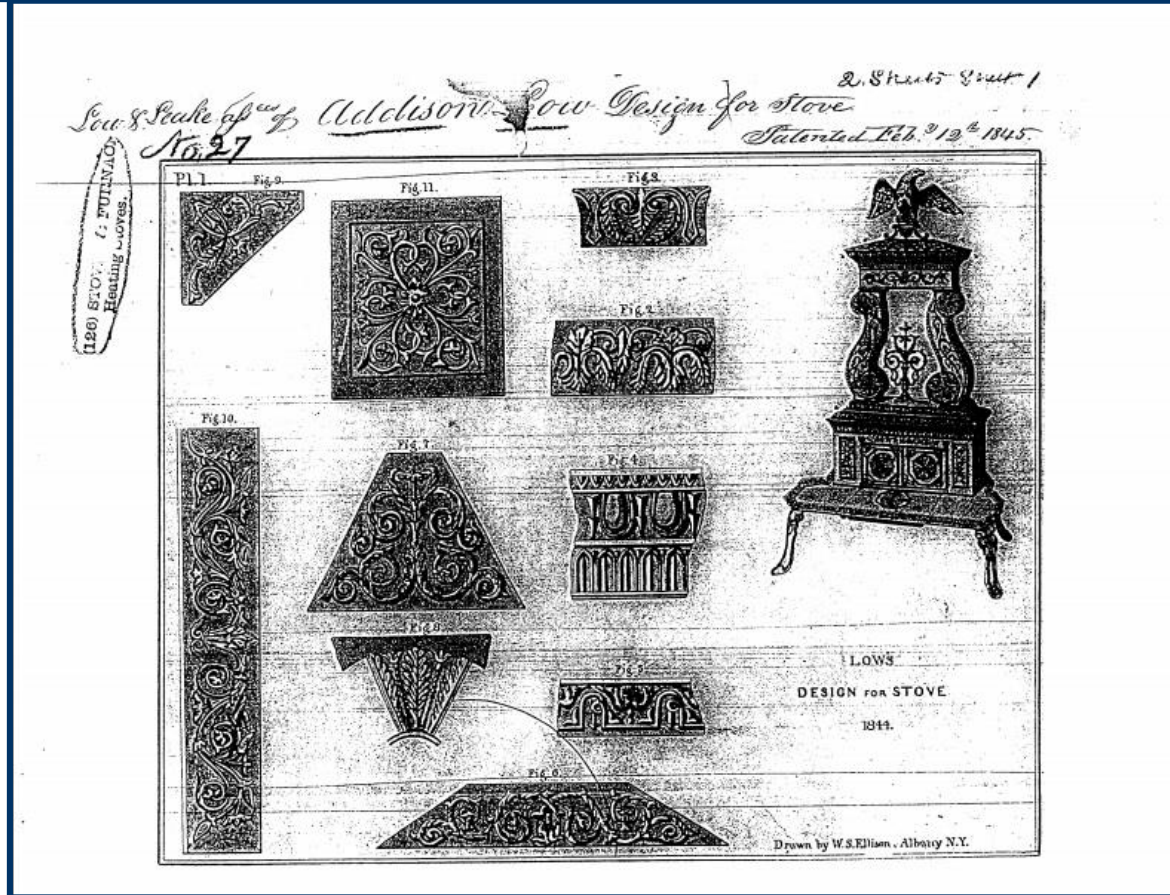


Additional Improvement Patents

- Additional Improvement (AI) Patents Authorized under Section 13 of the 1836 Act
- Inventors could file an AI Patent to have a previously-filed Specification reflect improvements to an invention
- AI patents were filed between 1837 and 1861



Design Patents were authorized under an 1842 Act



A Design Patent only has one claim, as we see in D668,288



US00D668288S

(12) **United States Design Patent** (10) **Patent No.:** **US D668,288 S**
Chiang (45) **Date of Patent:** **** Oct. 2, 2012**

(54) **BOOKBINDING MACHINE** 7,584,878 B2* 9/2009 Kandasamy 227/120
D628,235 S * 11/2010 Huotari et al. D18/34.1
(75) **Inventor:** **Chou-Chih Chiang, Taichung (TW)** D636,432 S * 4/2011 Huotari et al. D18/34.1
D643,463 S * 8/2011 Sakurai D18/53
(73) **Assignee:** **InnoStar Technology Pte Ltd, Hume** 2003/0185654 A1* 10/2003 Rather 412/37
(SG) 2003/0215309 A1* 11/2003 Engert et al. 412/33

(**) **Term:** **14 Years** FOREIGN PATENT DOCUMENTS
EM 001913518-0001 * 9/2011
* cited by examiner

(21) **Appl. No.:** **29/401,566** *Primary Examiner* — Bridget L. Eland
(74) *Attorney, Agent, or Firm* — Chun-Ming Shih

(22) **Filed:** **Sep. 12, 2011**

(51) **LOC (9) CL** **18-04**

(52) **U.S. CL** **D18/34.1**

(58) **Field of Classification Search** **D18/34.1,**
D18/34.2, 34.9, 50, 53; D19/65-69; 156/908;
412/9, 33-43

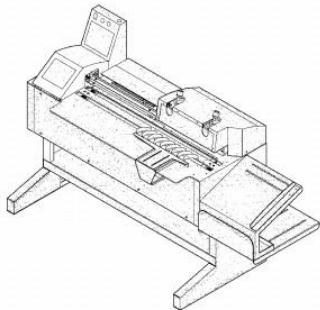
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,879,783 A * 4/1975 Giudie 412/43
D261,530 S * 10/1981 Hausmann D18/34.2
D284,870 S * 7/1986 Terraciano D18/34.2
D407,740 S * 4/1999 Ina et al. D18/53
D464,080 S * 10/2002 Yamano et al. D18/53
D529,545 S * 10/2006 Kimura et al. D18/53
7,393,171 B2* 7/2008 Fu 412/5

1 Claim, 10 Drawing Sheets



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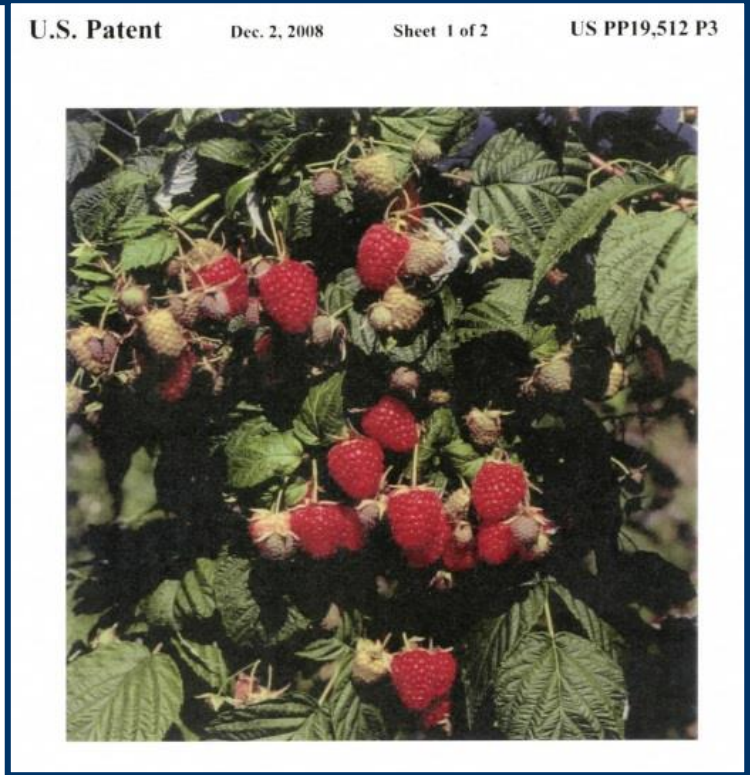
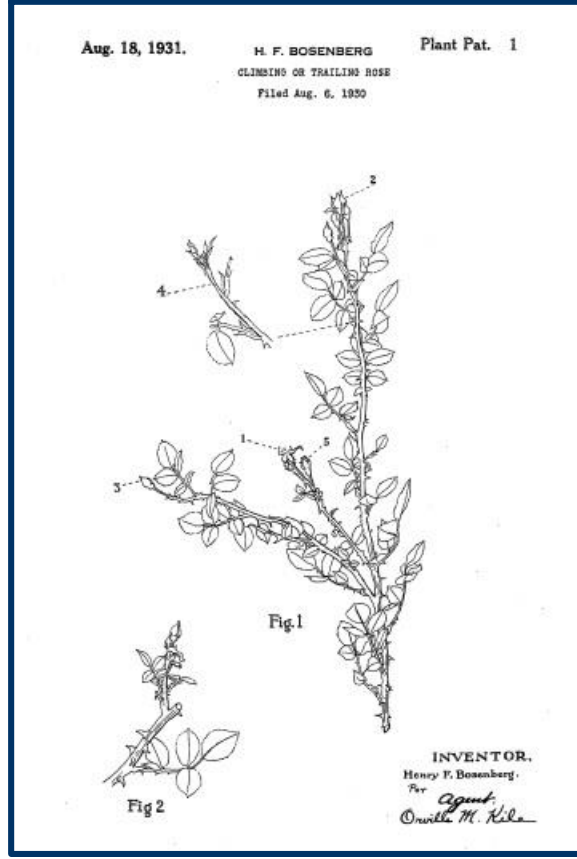
CLAIM

The ornamental design for a bookbinding machine, as shown.

DESCRIPTION

FIG. 1 is a front right perspective view of a bookbinding machine showing my new design;
FIG. 2 is a front elevation view thereof;
FIG. 3 is a rear elevation view thereof;
FIG. 4 is a left side elevation view thereof;
FIG. 5 is a right side elevation view thereof;
FIG. 6 is a top plan view thereof;
FIG. 7 is a bottom plan view thereof;
FIG. 8 is a front left perspective view thereof;
FIG. 9 is a rear left perspective view thereof; and,
FIG. 10 is a rear right perspective view thereof.

Plant Patent Act of 1930 (June 17, 1930), 46 Stat. 376 provided intellectual property protection for asexually reproduced plants.



Variety of Raspberry plant named 'Rafzaqu'



III. Other USPTO Publications

- **Official Gazette
(1872 to Present)**
- **Trademark
Registration Records
(1870 to Present)**



GPO's Service Mark registration number 4447221 used in connection with "Library Services, namely, providing information and publications from the Federal Government ... " and featuring an eagle and an opened book.

The record for Service Mark reg. no. 4447221:

TSDR

ASSIGN Status

TTAB Status

(Use the "Back" button of the Internet Browser to return to TESS)



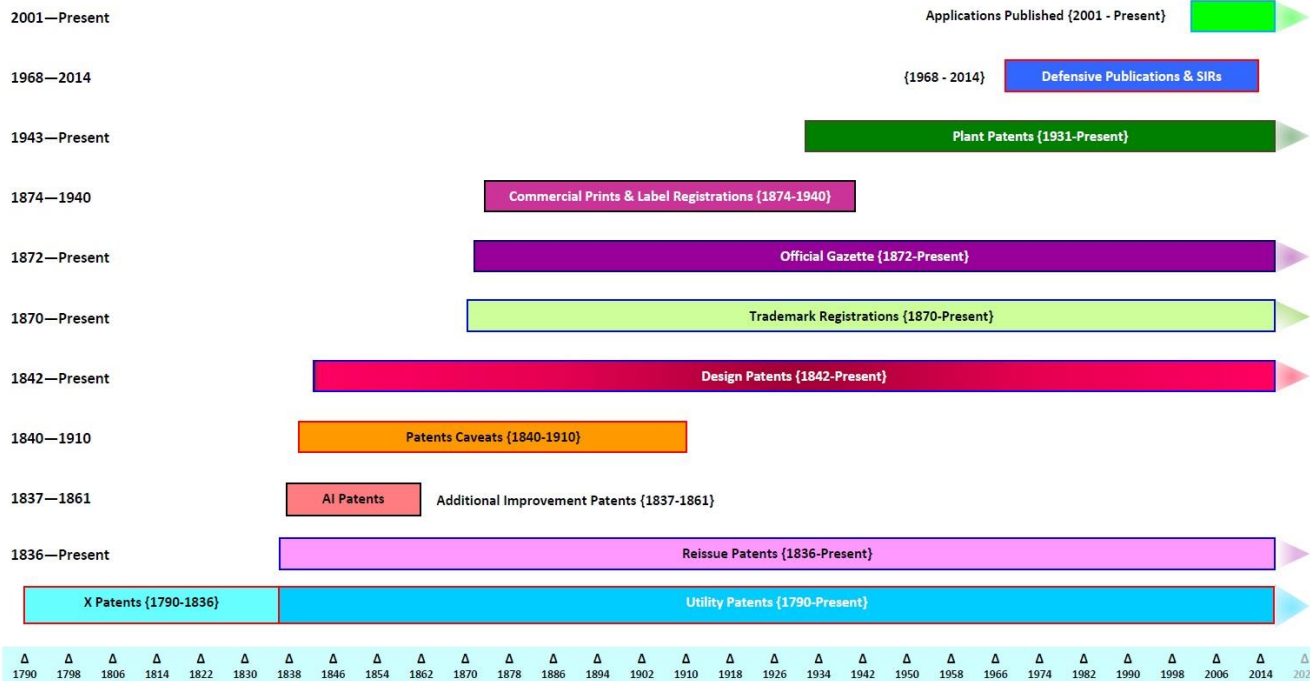
Goods and Services	IC 041, US 100 101 107, G & S: Library Services, namely, providing information and publications from the Federal Government on various subjects to libraries in the United States and its territories. FIRST USE: 19770930, FIRST USE IN COMMERCE: 19770930
Mark Drawing Code	(2) DESIGN ONLY
Design Search Code	03.15.01 - Eagles 03.15.24 - Stylized birds and bats 20.05.05 - Bibles (open); Books that are open; Cook books (open); Encyclopedias (open)
Serial Number	85905883
Filing Date	April 16, 2013
Current Basis	1A
Original Filing Basis	1A
Published for Opposition	September 24, 2013
Registration Number	4447221
Registration Date	December 10, 2013
Owner	(REGISTRANT) United States Government Printing Office FEDERAL AGENCY UNITED STATES Mail Stop: GC 732 North Capitol Street Washington D.C. 20401
Attorney of Record	LaTonya Hayes
Description of Mark	The color(s) red, white, and blue is/are claimed as a feature of the mark. The mark consists of a rounded white eagle surrounding a white-outlined red book. The entire image has a blue shield shaped background.
Type of Mark	SERVICE MARK
Register	PRINCIPAL
Live/Dead Indicator	LIVE

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Major USPTO Publications are covered in this handout:

Patent and Trademark Documents Timeline:

A Visual History of Major United States Patent and Trademark Office Documents



Patent Office Fire (December 15, 1836)

Questions?



