

Regional Seminar on the Patent Cooperation Treaty (PCT) and PATENTSCOPE for African Countries

organized by the World Intellectual Property Organization (**WIPO**)

in cooperation with the African Regional Intellectual Property Organization (**ARIPO**)

the Japan Patent Office (**JPO**)

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Introduction to the Patent System and the Challenges Facing Developing Countries

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Outline

- The Patent System and its History;
- Some simple Examples of granted patents;
- Conditions of Patentability; Process of obtaining Patent Rights at National, Regional & International Level;
- Anatomy of a patent document;
- Exclusive rights conferred to a patentee;
- Possible Exceptions and limitations to patent rights;
- Advantages of Using the Patent System;
- Challenges to the patent system & particularly in Developing Countries;



History of Patent law

- **In 500 BC**, in the Greek city of [Sybaris](#) (located in what is now southern Italy), “encouragement was given to all who should discover any new refinement in luxury, the profits arising from which were secured to the **inventor by patent for the space of a year.**“
- 1449 The crown of England issued [letters patent](#) providing any person with a monopoly to produce particular goods or provide particular services. The first such letter was granted by Henry VI in 1449 to a [Flemish](#) man for a 20 year monopoly for his invention.
- **1474 First patent law** by the republic of Venice; patents were issued



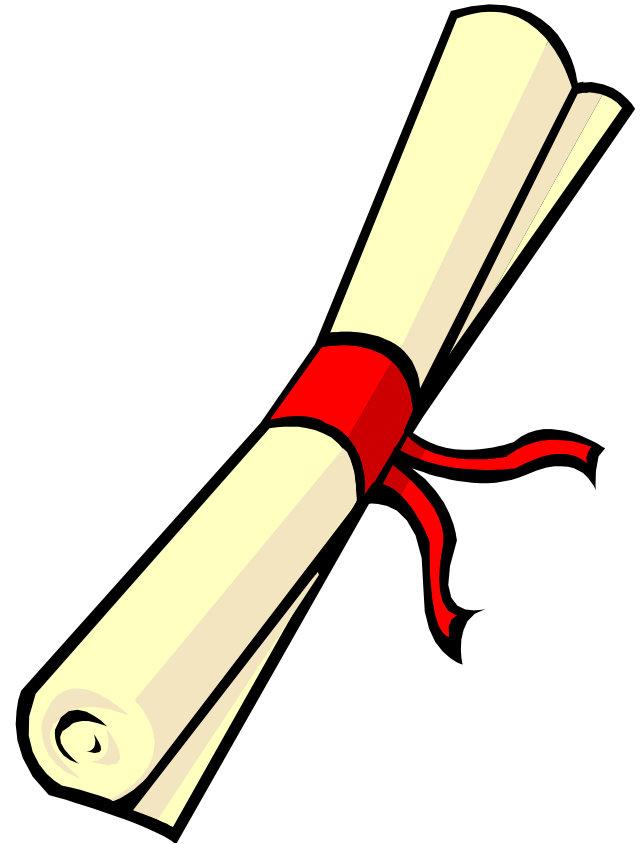
Some Historical events of the patent law

- ▶ First Patent Law - 1474 at Venice
- ▶ English Law - 1624 - status of Monopolies
- ▶ French Law - Patents Act 1791
- ▶ American Law - Patents Act 1790
- ▶ Other European countries - laws enacted between 1800 and 1882
- When did African Countries enact their respective first Patent Laws?



What is a patent?

- Legal title by Public Authority;
Request/Application with
Patent Offices;
- Owner has exclusive rights in
defined countries for at most
20 years;
- Invention must be fully
disclosed and
- Open to public scrutiny after
grant or 18 months from
priority date.



What is a patent? (cont.)

- Right granted to protect inventions;
- Right to exclude others from using a patented invention without patentee's;
- consent --- licensing
- Duty of disclosure;
- Conditions of patentability;
- Governments must make a balance between patentee's rights and public interest;



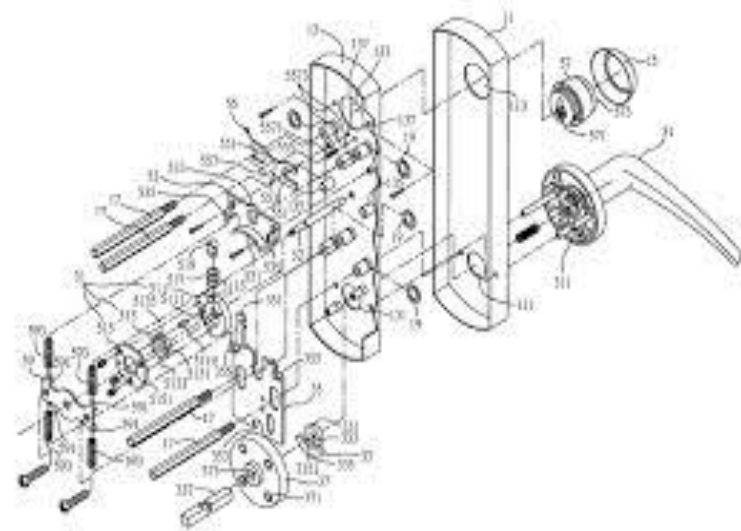
Further Definition of a Patent

- Definition: A patent is an exclusive legal right granted for an invention that is:
 - **New (Novel)**
 - **Involves an inventive step (Non obvious)**
 - **Capable of industrial application**
- Duration: Up to 20 years (in most Countries) from filing date
- Territorial right
- Can be licensed or sold to third parties
- Utility Models (or short-term patents): up to 10 years



EXAMPLES OF WHAT CAN BE PATENTED

- **A Product:** a door lock
 - **A Composition:** a chemical composition of lubricants for door locks
 - **An Apparatus:** a machine for making door locks
 - **A Process:** a method for making door locks
- ... or an **improvement** on any of these
(**90% of patents are improvements of existing patents or known Technologies**)



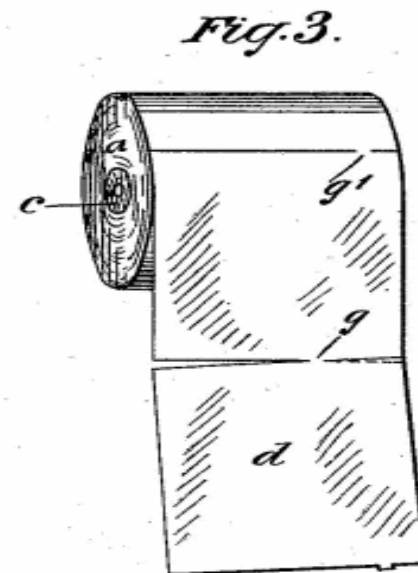
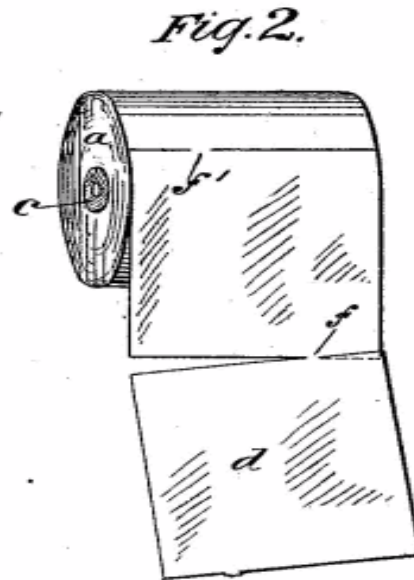
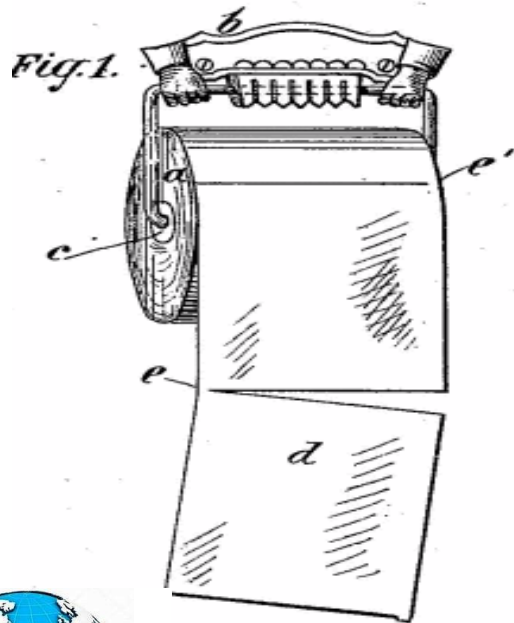
Example of patents

(No Model.)

S. WHEELER.
WRAPPING OR TOILET PAPER ROLL.

No. 459,516.

Patented Sept. 15, 1891.



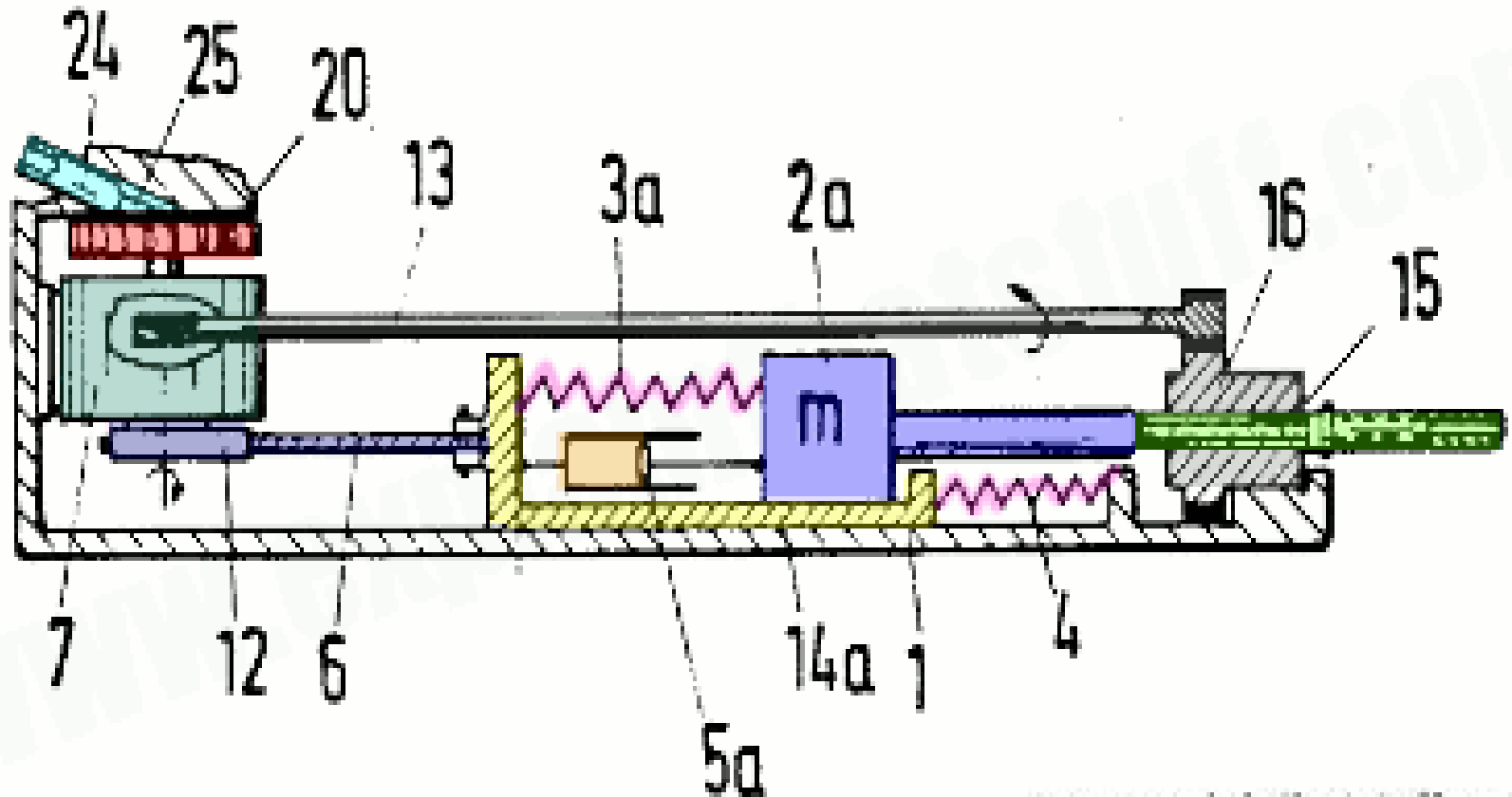
Example of a patent

U.S. Patent

June 2, 1992

Sheet 1 of 2

5,117,923



Courtesy US Patent & Trademark Office

www.explainthatstuff.com

Anatomy of a Patent

- Title;
- Field Of The Invention;
- Background Of The Invention;
- Objectives Of The Invention;
- Summary Of The Invention;
- Brief Description Of The Drawings;
- Detailed Description Of The Preferred Embodiments;
- Modifications Of The Preferred Embodiments;

Specifications

- Claims

This is the right you own!



US005413579A

United States Patent [19]

[11] Patent Number: 5,413,579

Tom Du Toit.

[45] Date of Patent: May 9, 1995

[54] SURGICAL SAW GUIDE AND DRILL GUIDE

WO88/08691 11/1988 WIPO .

[75] Inventor: Guillaume Tom Du Toit, Sandton, South Africa

OTHER PUBLICATIONS

[73] Assignee: Technology Finance Corporation (Proprietary) Limited, Sandton, South Africa

Yehuda Charit; *Application of a Three Dimensional Geometrical Analysis to a Case of Orthopaedic Surgery*; Feb., 1986, University of the Witwatersrand Research Report, Johannesburg.

[21] Appl. No.: 89,639

Yehuda Charit and Guillaume Tom Du Toit; *The Problem and Theoretical Solution of a Three Dimensional Realignment of Deformed Long Bones*; Sept., 1986, University of the Witwatersrand Research Report, Johannesburg.

[22] Filed: May 10, 1993

[30] Foreign Application Priority Data

May 13, 1992 [ZA] South Africa 92/3472

[51] Int. Cl.⁶ A61F 5/00

[52] U.S. Cl. 606/87; 606/96

[58] Field of Search 606/87, 96, 97, 98, 606/88, 89, 86, 53; 83/749, 761, 762, 782

Jiang, et al; *A New Jig for Proximal Tibial Osteotomy*, No. 225, Jan., 1988; pp. 118-123, *Clinical Orthopedics and Related Research*.

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U.S. PATENT DOCUMENTS

2,812,761	11/1957	Palkovitz	606/98
2,865,025	9/1989	Burzi et al.	606/96
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551446	1/1958	Canada	606/98
1349335	12/1963	France	606/96

[57] ABSTRACT

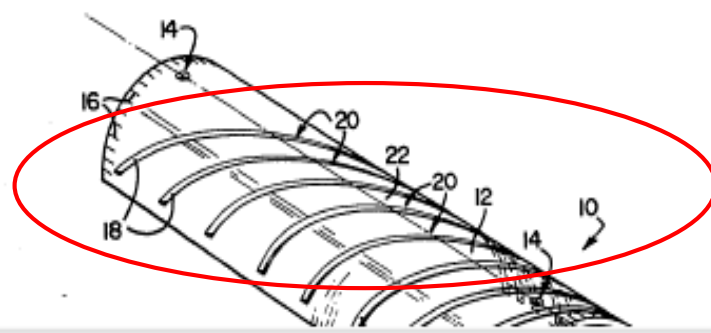
A set of surgical instruments which comprises a saw guide and a drill guide respectively for guiding a saw blade cutting a bone and for guiding a drill bit for thereafter forming a passage in the bone. The saw guide has a seat formation for seating against the bone, and a guide formation for guiding the saw. The drill guide comprises a bit guide and an anchor to align the bit guide relative to the cut. Also provided are a saw guide and a drill guide; and a method of carrying out an osteotomy procedure by making an oblique cut through a long bone at a position where bone portions which are misaligned intersect each other to provide two bone fragments, whereafter they are loosely bolted together and then rotated about the axis provided by the bolting until the misalignment is reduced, after which they are bolted tightly together.

12 Claims, 6 Drawing Sheets

Patent Document

Bibliographic Information

- Patent / Publication Number
- Publication Date
- Title
- Inventor
- Applicant



Basic Types of Claims

- Independent Claim.
- Dependent Claims.
- Omnibus Claims
 - mainly used in provisional applications & not accepted by most offices



Types of Claims Continued

- Product or apparatus claims:
 - Claims referring to a physical entity,
- Process, method or use claims:
 - Claims referring to an activity;



Examples of claims

Example 1: Composition of matter

What is claimed is:

1. A composition comprising a solid, a liquid, and a gas.

- Claim 1 is an independent claim, because it does not rely on a preceding claim.



Examples of claims

2. The composition of claim 1, wherein the solid is a salt.

- Claim 2 is a dependent claim, because it refers back to and further limits an independent claim.

3. The composition of claim 2, wherein the salt is sodium chloride.

- Dependent claims can depend on other dependent claims.



The various routes for applying for a patent

- The national route;
- The Paris Convention Route;
- Regional Route;
- The PCT route;



Exclusive rights conferred to a patentee

- A patentee can prevent others without his consent from:
 - Making, importing, using, offering for sale or selling the patented product;
 - Using the patented process and doing any acts in the paragraph above in respect of a product obtained directly by such process.
- Protection against infringement;
- Possibility of assigning and licensing the rights, etc.



Possible Exceptions and limitations to patent rights

- private acts for non-commercial purposes;
- acts for the purpose of teaching;
- acts for experimental purposes or scientific research;
- preparation of medicines prescribed by doctors;
- continued use by a prior user;
- certain uses on foreign vessels, aircraft and land vehicles which temporarily or accidentally entered the national territory;
- acts for obtaining regulatory approval for pharmaceuticals;
- acts performed for a farmer's own use and for the development of new varieties;
- Government use and compulsory licenses, etc.



Role of the Patent System

Encouragement for Improvement of Technology

- Providing Reward as Exclusive Rights for disclosure
- Making profits or earning Royalty by putting the Invention into Practice
- Transferring into public property after expiry of term of Patent

– Human Technical Development, etc.



Legal Framework needed for Intellectual Property Protection & use

- Governments/Patent Offices are the legal custodians;
- Three IP main Administration Machines:
 - IP Offices;
 - External machinery (public, private sector, agents, etc.);
 - the Courts of Law.



Why apply for patent protection?

- Market exclusivity;
- To recover R&D investments;
- Facilitates licensing;
- Advantageous negotiating tool;
- Financing opportunities (venture capitalists, etc);
- Favorable image and credibility;
- Freedom to operate;
- Higher market value and publicity;
- International expansion; etc.



Advantages of Using the Patent System

- Preventing Competitors from Copying or closely Imitating a Company's Products or Services;
- Avoiding wasteful Investment in Research & Development (R&D) and Marketing;
- Creating a corporate Image through Trademarks, Branding, etc;
- Negotiating Licensing or Franchising Agreements;
- Increasing the Market value of **Companies**;
- Acquiring venture capital, etc.



Advantages of Using the Patent System_(Continued)

- Diffusion of Knowledge & IP culture in the populations;
- Access to IP Information-
- Reverse Engineering;
- Attraction of Direct Foreign Investment;
- Increase of Market value of **Products**;
- Access to Venture Capital;
- Industrialization and Technical Development
- Social and Economic Development, etc.



Obstacles Facing users of the Patent System in Developing Countries

- Limited awareness & Knowledge of the patent system
- High costs (filing, translation, drafting, maintain)
- “Complexity” of the patent system;
- Limited Expertise to make use of the patent system particularly in Reverse Engineering;
- Delays in obtaining patent rights;
- Average Success rate in getting patent rights (patents) being very low;
- Inability to monitor and enforce patent rights, etc.



Challenges in Developing Countries

- Lack of national coordination & policies on IP;
- Limited diffusion of education in the public;
- Lack of a proper national legislative framework;
- Low levels of research and development;
- human capital deficit and lack of balanced intellectual property systems, etc.
- No IP curricula at all levels of Education;

Limited Funding on all issues relating to IP



Challenges to Small IP Offices continued

- Legal Framework;
 - Limited Implementation of appropriate national IP Laws;
 - Lack of Appropriate IP Policies and Strategies;
 - Limited Domestication of Regional and International IP Treaties;
 - Limited IP knowledge by the Judiciary, Policy Makers & Enforcement Agents;
 - Limited Enforcement of IP rights in developing countries;

General Challenges to the present IP system

- The lack of uniform worldwide competition policies and laws as an instrument to regulate potential abuses of patent rights;
- IP & Traditional Knowledge;
- Application of IT in life sciences;
- IP and the Internet of Things (IoT);
- IP & Big Data;
- IP & Nano-technology, etc.



Final thoughts

- In a global economy, a homogenous global intellectual property system is still lacking and is urgently needed;
- The IP system must reflect the needs of both Developing & Developed countries;
- The main problem is to identify which type of knowledge should be in the public domain and which should be in Private domain;

What Challenges is your country facing on matters relating to IP?



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