Reading a Patent

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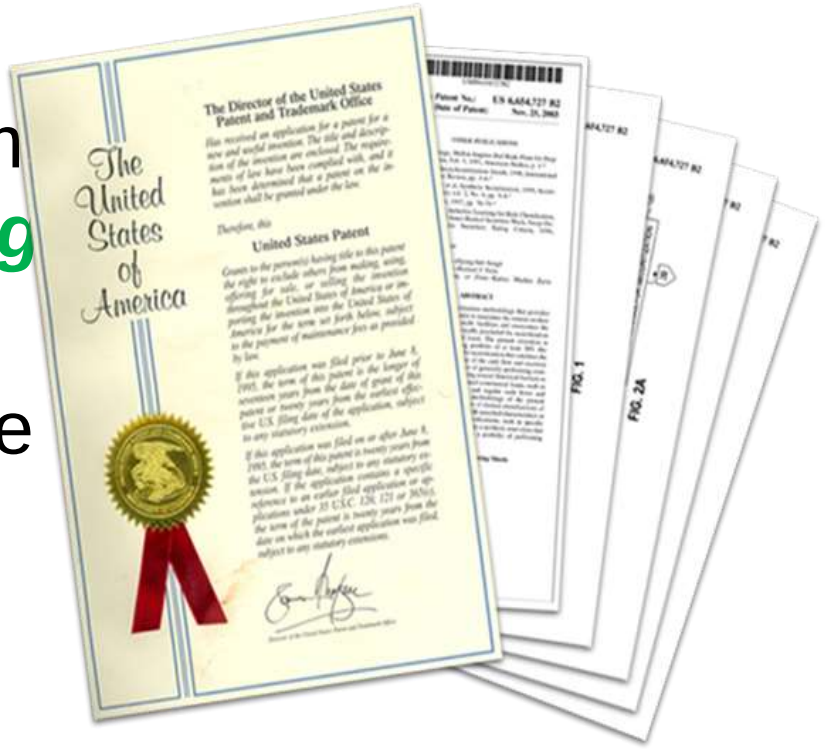
CSIR – URDIP

What is a patent?

- Legal document
- Right to stop others from ***making, using or selling*** - any one of these
- Exclusive right to practice subject to non-infringement of previous patents
- Grant for a limited period of time



http://www.patriarchpartners.com/HerPatent.aspx

REQUIREMENTS OF PATENTABILITY

Substantive Requirements

- Subject matter
- Novelty
- Non-Obviousness
- Utility

Procedural Requirements

- Written Description
- Enablement
- Definiteness
- Best mode

Ideas/concepts cannot be patented

Social Contract

- Patent rights are granted in return for the inventor's full disclosure of the technology to the public
- The patent holder receives the right to prevent anyone else from practicing the invention
- In exchange, the government ensures that the information regarding the invention is publicly disclosed, and the invention itself is available for anyone's use after the expiration of the patent.

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Reading a Patent

- Patent Document represents disclosure of the technology to the public
- Main Sections
  - Cover Page
  - Specification
  - Claims

Cover Page

- Mainly Bibliographic Information

  Like name of applicant, inventor

  Date of priority, filing, publication, and grant of the patent

  Title and abstract of the invention

- No legal implication for interpreting the patent
- Different Patent Offices have unique sets of bibliographic information

Cover Page – INID Codes

- **Standardized By** - World Intellectual Property Organization (WIPO)
- **INID Code** - **I**nternationally agreed **N**umbers for the **I**dentification of (bibliographic) **D**ata
- **Main Purpose** – To make the data language independent
- **Used By** – All patent offices world wide
- Bracketed number adjacent to each data Sub-section (INID Code) refers to specific field

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Reading Cover Page

- **12** - **Nature of publication** (US Patent) and underneath First Inventor's name
- **10** - **Patent Number**
  - Sequentially assigned
  - May or may not be synonymous with patent number
  - If synonymous, suffix is used to denote status (e.g.Europe- A for Application,B-Granted)
- **45** - **Issue date**
  - Two primary significances
    - Date of public domain / prior-art

Reading Cover Page

- **54 - Title of the patent**
  - No impact on interpretation
- **75 - Inventors names and place of residence**
  - No significance to order of names
  - All have undivided interest
  - Can independently practice or license
- **73- Assignees and their place of business**
  - Assignment documents are recorded in patent office and accessible to public
- **21- Application number**
  - Assigned by patent office

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- **22- Filing date**
  - May not be date to determine patent term
  - US allows refiling with or without new disclosures (Continuous generically or continuation – in-part if new disclosure added)
  - Consult 63 to determine patent term
- **63 - Shows related applications**
  - Continuation in part of application No.09/828,646, dt. 5 Apr 2001
  - Earlier application is continuation in part
  - May affect prior art or priority date of a claim.
- **51- International Classification (IPC)**
  - Indispensable for retrieval of patent documents for prior art by patent office, inventors, attorneys & others

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Reading Cover Page

- **52** - **US Classification code**
  - Bolded code most relevant
- **58** - **US Codes** where examiner performed the search for prior art
- **56** - **References**
  - Made of record-examined patentability of invention in the light of these refs.
  - Sub-divided into US Patents, other Patents & other Publications

Reading Cover Page

- **[ ]** Following the references,
  - The names of prim. Examiner, Asst. Examiner and the Attorney or Firm of record are listed.
- **57- Abstract-**
  - Short description of the invention
  - Written by the applicant
  - Gist of technical disclosure
  - Not used for interpreting the scope of the claims
- **[ ]** At bottom,
  - The number of claims and drawings in the patent

Specification

- Description of the invention must satisfy procedural requirements of patentability
  - Written description
  - Enablement
  - Definiteness
  - Best mode

Specification

- **Patent Office Guidelines-preferred layout**
  - Title of the invention
  - Cross reference to related applications
  - Background of the invention
  - Summary of the invention
  - Description of the drawings
  - Detailed description of the invention
  - Claims
- Specification helps to interpret and define the scope of claims

Specification

- **Background of the Invention**
  - Typically drafted for a jury audience
  - Selected art in the field discussed
  - Emphasize difference with current invention and need for it
  - Explain technologies of several key relevant references

Specification

- **Summary of the Invention**
  - Different from the Abstract
  - Describes the invention that is being claimed in the set of claims at the end of the patent
  - Meant to discuss the Invention (i.e. claims) rather than disclosure as a whole
  - Discusses the nature and substance of the invention, and include statements on the objectives of the invention
  - Advantage of the invention/how it solves problems presented in the background

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Specification

- **Brief Description of the Drawings**
  - Provides short and concise summary as to the general nature of each drawing included in the patent
  - Includes information such as
    - What is depicted in each drawing figure
    - The number of the drawing figure, and
    - The type of drawing depicted by the figure

Specification

- **Example –**
  - FIG. 1 is a schematic view of an electrical power unit according to the invention;
  - FIG. 2 is a schematic view of a motive unit according to the invention;
  - FIG. 3 is a schematic view of an auxiliary power unit according to the invention.
- **They can also be**
  - Isometric views, Section views, Cross-sections, Exploded View, Perspective View, Flow chart etc

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Specification

- **Detailed Description of the Invention**
  - Describes the entirety of the invention in combination with the drawings
  - Sufficiently detailed to enable one reading the description to be able to make or use the invention
  - Refers to the various drawing figures and numbered elements provided in the figures
  - Also discusses various exemplary embodiments of the invention

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CLAIMS

- Minimum one claim
- Must particularly point and distinctly claim the subject matter- invention
- Define the meters and bounds of the patentee's rights
- Each claim to be written in a single sentence
- Claim has
  - **A preamble** – introductory statement that names the thing to be claimed
  - **A Transition Phrase** – "comprising"; and
  - **The body** – defines what the elements or steps of the named things are

Claims – Transitional Phrases

- **Transition Phrases**
  - **Comprising**
    - Open ended language
    - Does not exclude additional, unrecited elements or method steps
  - **Consisting of or consisting essentially of**
    - "closed" transition language
    - Define the scope of a claim with respect to what unrecited additional components or steps, if any, are excluded from the scope of the claim

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Types of Claims

- **Claim Flavors**
  - **Independent**
    - An independent claim stands alone
  - **Dependent**
    - Refers back to and further limits another claim
    - Has meaning when combined with a preceding claim

Claims – Independent Claim

Preamble

Transition Phrase

An electrical power unit comprising

Body

a) a combustion chamber, in which fuel is combusted to release heat; and

b) a **thermionic converter**, which converts said heat into electrical energy; and

c) an energy control system;

wherein said control system takes an input representative of the demand for electrical power and computes and controls the intake of fuel and air into said combustion chamber.

Claims – Dependent Claims

2. The electrical power unit of claim 1 wherein said **thermionic converter** is a **thermotunneling converter**.

3. The electrical power unit of claim 1 wherein said **thermionic converter** comprises **low work function electrodes**.

Claims

Claim 1- An electrical power unit comprising:

a) a combustion chamber, in which fuel is combusted to release heat; and

b) a **thermotunnelling** converter which converts said heat into electrical energy; and

c) an energy control system;

wherein said control system takes an input representative of the demand for electrical power and computes and controls the intake of fuel and air into said combustion chamber.

Claims – Another Example

Preamble

Transition Phrase

A motor vehicle for transporting people and objects, having a chassis and a body mounted on the chassis, the motor vehicle comprising

Body

a) a plurality of wheels under the body, supporting the chassis;

b) a transmission mounted on the chassis and coupled to at least one of the plurality of wheels;

c) a **motor** mounted on the chassis, having a fluid input and an output coupled to the transmission; and

d) a **fluid supply** mounted within the body, coupled to the fluid input of the motor.

URDIP

Claims – Dependent Claims

2. The motor vehicle of claim 1, in which the **fluid supply** is a tank of compressed **gas**, and the **motor** is a **variable-displacement fluid motor**.
3. The motor vehicle of claim 2, in which the **gas** is **air**.

Claims

Claim 1- A motor vehicle for transporting people and objects, having a chassis and a body mounted on the chassis, the motor vehicle comprising:

a) a plurality of wheels under the body, supporting the chassis;

b) a transmission mounted on the chassis and coupled to at least one of the plurality of wheels;

c) a variable-displacement fluid motor mounted on the chassis, having a fluid input and an output coupled to the transmission; and

d) a tank of compressed *air* mounted within the body, coupled to the fluid input of the motor.

Claims – Independent Claim

Preamble

Transition Phrase

A magnetic field generating assembly comprising a

Body

a) superconducting magnet located in a **cryostat** and defining a **bore** accessible from outside the cryostat; and

b) a mechanical refrigerator having at least two cooling stages for at least partly cooling the cryostat; and

c) a **coolant path** extending from the refrigerator into the magnet bore, the coolant path being coupled for heat exchange with a cooling stage of the refrigerator other than the coldest cooling stage so that the refrigerator is adapted also to cool coolant in the coolant path.

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Claims – Dependent Claims

Claim 2 - An assembly according to claim 1, wherein the **bore supports one or more components** which are coupled to the coolant path.

Claim 5 - An assembly according to claim 2, wherein the or **each component** comprises **one or more of RF and gradient coils**.

Claim 6 - An assembly according to claim 1, wherein the **cryostat** includes a **number of heat shields**, the refrigerator being coupled to one or more of the heat shields.

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Claim 2 reads as ….

- Claim 2- A magnetic field generating assembly comprising a
  - superconducting magnet located in a **cryostat** and defining a **bore** accessible from outside the cryostat; wherein the **bore supports one or more components** which are coupled to the coolant path and
  - a mechanical refrigerator having at least two cooling stages for at least partly cooling the cryostat; and
  - a **coolant path** extending from the refrigerator into the magnet bore, the coolant path being coupled for heat exchange with a cooling stage of the refrigerator other than the coldest cooling stage so that the refrigerator is adapted also to cool coolant in the coolant path.

Claim 5 reads as….

- Claim 2- A magnetic field generating assembly comprising a
  - superconducting magnet located in a **cryostat** and defining a **bore** accessible from outside the cryostat; wherein the **bore supports one or more components** which are coupled to the coolant path wherein **the or each component comprises one or more of RF and gradient coils,** and
  - a mechanical refrigerator having at least two cooling stages for at least partly cooling the cryostat; and
  - a **coolant path** extending from the refrigerator into the magnet bore, the coolant path being coupled for heat exchange with a cooling stage of the refrigerator other than the coldest cooling stage so that the refrigerator is adapted also to cool coolant in the coolant path.

Claim 6 reads as ….

- Claim 6 - A magnetic field generating assembly comprising a
  - superconducting magnet located in a **cryostat** which includes a **number of heat shields**, the refrigerator being coupled to one or more of the heat shields and defining a **bore** accessible from outside the cryostat; and
  - a mechanical refrigerator having at least two cooling stages for at least partly cooling the cryostat; and
  - a **coolant path** extending from the refrigerator into the magnet bore, the coolant path being coupled for heat exchange with a cooling stage of the refrigerator other than the coldest cooling stage so that the refrigerator is adapted also to cool coolant in the coolant path.

TURMERIC IN WOUND HEALING

US005401504A

United States Patent [19]

Das et al.

[11] **Patent Number: 5,401,504**

[45] **Date of Patent: Mar. 28, 1995**

[54] **USE OF TURMERIC IN WOUND HEALING**

[75] Inventors: **Suman K. Das; Hari Har P. Cohly,** both of Jackson, Miss.

[73] Assignee: **University of Mississippi Medical Center,** Jackson, Miss.

[21] Appl. No.: **174,363**

[22] Filed: **Dec. 28, 1993**

[51] **Int. Cl.**[6] **A61K 35/78**

[52] **U.S. Cl.** **424/195.1;** 514/925; 514/926; 514/927; 514/928

[58] **Field of Search** 424/195.1

[56] **References Cited**

U.S. PATENT DOCUMENTS

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Kumar et al GA.119: 871K (1993) of Ind. Vet. J. 70(1):42-4 (1993).

Abstracts of Charles et al Trop. Geogr. Med: 44(1-2) 178-181 Jan. 1992; Rafatullah et al J. Ethnopharmacol. 29(1): 25-34 Apr. 1990; Kutton et al Tumori 73(1): 29-31 Feb. 28, 1987; Mehra et al. Tokai J Etpharm Med 9(1): 27-31 Mar. 1984.

Primary Examiner—Shep K. Rose

Attorney, Agent, or Firm—Wenderoth, Lind & Ponack

[57] **ABSTRACT**

Method of promoting healing of a wound by administering turmeric to a patient afflicted with the wound.

6 Claims, No Drawings

US5401504

- **Claims:**

1. A METHOD OF PROMOTING HEALING OF A WOUND IN A PATIENT, WHICH CONSISTS ESSENTIALLY OF ADMINISTERING A WOUND-HEALING AGENT CONSISTING OF AN EFFECTIVE AMOUNT OF TURMERIC POWDER TO SAID PATIENT.

2. THE METHOD ACCORDING TO CLAIM 1, WHEREIN SAID TURMERIC IS ORALLY ADMINISTERED TO SAID PATIENT.

3. THE METHOD ACCORDING TO CLAIM 1, WHEREIN SAID TURMERIC IS TOPICALLY ADMINISTERED TO SAID PATIENT.

4. THE METHOD ACCORDING TO CLAIM 1, WHEREIN SAID TURMERIC IS BOTH ORALLY AND TOPICALLY ADMINISTERED TO SAID PATIENT.

5. THE METHOD ACCORDING TO CLAIM 1, WHEREIN SAID WOUND IS A SURGICAL WOUND.

6. THE METHOD ACCORDING TO CLAIM 1, WHEREIN SAID WOUND IS A BODY ULCER.

URDIP

Claims

- Claims are the essence of a patent
- Legal protection is restricted to what is claimed in this section
- Invention is lost to public domain even if it written in the detailed description but not claimed

Sources of Patent Inormation

- National Patent Offices
  - USPTO (www.uspto.gov)
  - India (www.ipindia.gov.in)
- Global Databases
  - esp@cenet (EPO)
  - Patentscope (WIPO)
- Private Databases (Paid)
  - Thomson innovation
  - Qpat
  - Patbase

URDIP

Free Vs. Paid Databases

- Beyond Key Words
- Indexing and Classification
- Speed
- Family Patents
- Family Tree
- Images, Formats,
- Statistical Analysis and Graphs
- Citation Analysis
- Legal Status

Thank You