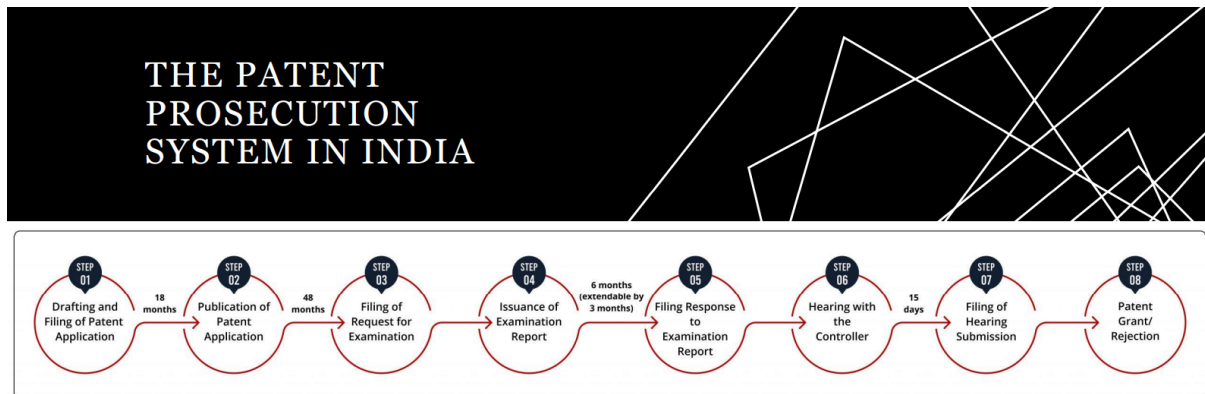
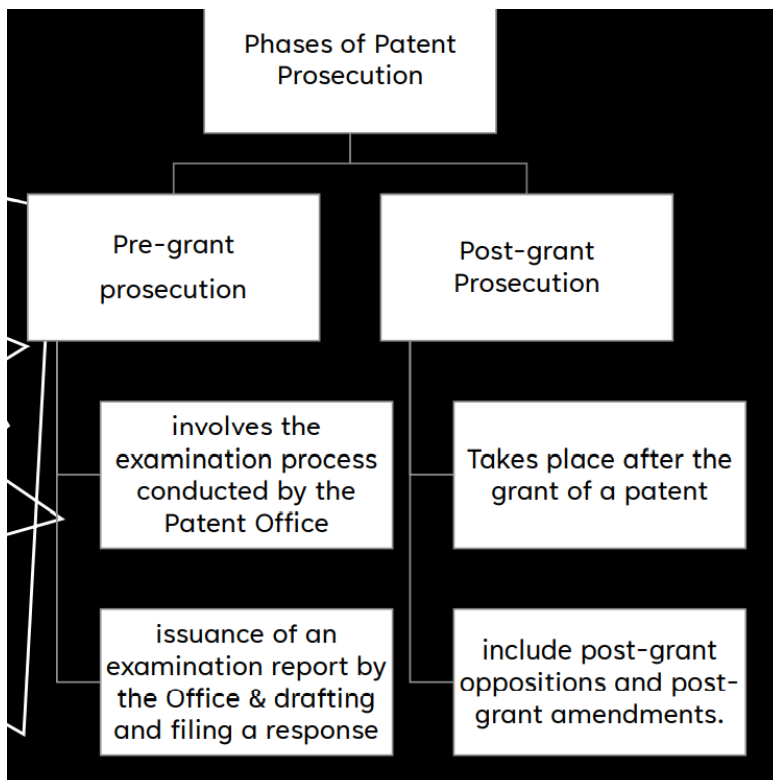


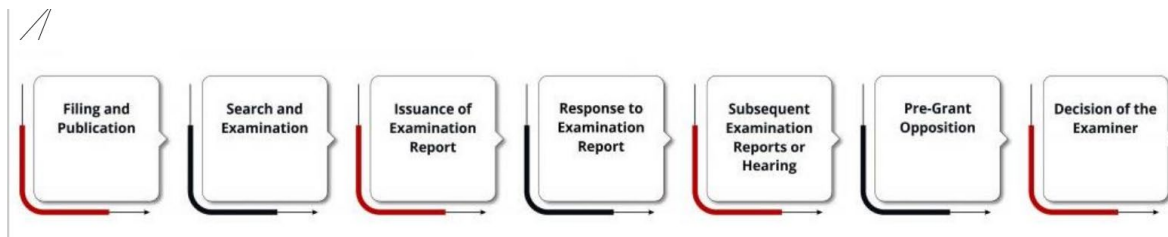
## PATENTS PROSECUTION:

Patent prosecution is a process where applicants and/or their representatives interact with the Patent Office to get a grant for their patent application



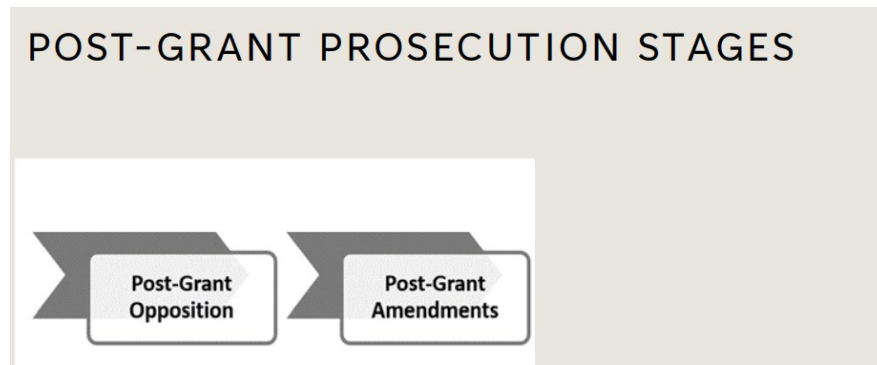
The application is sent for a technical examination to check whether the invention meets the three basic requirements of patentability, i.e., novelty, inventiveness, and industrial applicability.





1. **Filing provisional/non provisional**, In India, the Patent Office functions from four jurisdictions viz. Kolkata, Delhi, Chennai, and Mumbai.
2. **Searching** Patent Office reviews all the formal documents, and the patent examiners conduct a worldwide patentability search based on the key features of the invention to check for any closest prior art
3. **Issuance of Examination Report** • Examiner finds that the invention lacks novelty or inventiveness in relation to any prior art, or it falls within the ambit of “non-patentable inventions”, then he/she enlists such objections in an examination report and sends it to the applicant or their representatives.
4. **Response to Examination Report** • An applicant may decide to modify or amend the specification, claims, or drawings; which is in scope with the original application
5. **Subsequent Examination Reports or Hearing Before the Examiner** • If the examiner is satisfied with the arguments or amendments, then he/she proceeds by issuing a patent certificate to the applicant.
6. **Pre-Grant Opposition** • The search and examination mainly take place between the examiner and the applicant by Section 25 Opposition to Patents
7. **Decision of the Examiner** The examiner once again reviews the documents submitted by the applicant and

makes a final decision of whether to proceed with the grant or refusal



1. **.Post-Grant Opposition** • In India, under Section 25 (2) of the Patents Act, a post-grant opposition can be filed after the grant of a patent but within one year from the date of publication of the grant of a patent based on any of the grounds described under the said section
2. **Post-Grant Amendments Section 57 and Section 59** of the Patents Act provides the provision of both pre-grant and post-grant amendments. Section 59 states that the proposed amendments must meet certain requirements  
Post-Grant Amendments Section 57 and Section 59 of the Patents Act provides the provision of both pre-grant and post-grant amendments. Section 59 states that the proposed amendments must meet the following requirements

**IPR**

- ◆ Intellectual property refers to creations of the mind i.e. inventions, industrial designs for articles & literary works. It is a product of the intellect that has commercial viability and importance.
- ◆ According to World Intellectual Property Organization (WIPO),  
"Intellectual Property refers to literary, artistic and scientific works, Performances, Broadcast, Videos, Computer games, Computer Programmes, Images, Logos, Trademarks and all other products resulting from intellectual activity"

## Intellectual Property Rights

- ◆ Intellectual property rights (IPR) have been defined as ideas, inventions, and creative expressions based on which there is a **public willingness to bestow the status of property**.
- ◆ IPR provide certain **Exclusive Rights** to the inventors or creators of that property, in order to enable them **to reap commercial benefits from their creative efforts or reputation**.
- ◆ IPR is **prerequisite for better identification, planning, commercialization, rendering, and thereby protection** of invention or creativity.

### SIGNIFICANCE OF IPR

- ECONOMIC PROGRESS
- ENHANCE RESEARCH ON TECHNOLOGIES
- PROMOT INOVATION
- FACILATE LICENCING
- ENCOURAGE INVESTMENST THUS INDUSTRIALIZATION
- AVOID DUP
- REDUCE COST OF PRODUCT

# Patentability

- ◆ What can be patented?
  - ◆ Nearly anything can be patented from **Machines, medicines, computer programs, articles made by machines, compositions, chemicals, biogenetic materials, and processes**
  - ◆ **Process Patents:** process patent, the patent is granted for a particular manufacturing process, and not for the product itself.
  - ◆ **Product Patent:** it is an exclusive right given to the original inventor of a product. This means that **no other manufacturer** can provide the same product through the same or any other process.
  - ◆ Trade-Related Aspects of Intellectual Property Rights (TRIPs ) follow the product patent regime.
  - ◆ India's 1970 Patent Act allowed only process patent before it was amended in 2005 to comply with WTO's TRIPs provisions

## 1. UTILITY: is anything given below

- **PROCESS** any process you use to make shit
- **COMPOSITION OF MATTER** any thing you made to make shit
- **MANUFACTURES** shit the needs to go through manufacturing
- **MACHINE** machine for whatever your needs are

- ◆ Obtain a utility patent for a new invention, one may also file for this kind of patent if they are making new and useful improvements or enhancement to any existing processes, machines, matter, compositions or manufactures.
- ◆ Examples: microwave oven, genetically engineered bacteria for cleaning up oil spills, a computerized method of running cash management accounts, and a method for curing rubber.

## 2. DESIGN



- ◆ With reference to patents, the design is the “surface ornamentation” of the object.
- ◆ The design patent should include details such as the shape and configuration of the object invented or enhanced.
- ◆ To be eligible to obtain a design patent protection, one must ensure that the product’s design is inseparable from the object.
- ◆ And while the object and design should be in sync, the design patent is only granted for, and thus only protects, the appearance of the object.
- ◆ However, if one wishes to protect both the functional and the structural features of the object invented, they can also file for a utility patent.

## Types of Patent Applications

1. **Provisional Application**
2. Ordinary or Non-Provisional Application
3. Convention Application
4. PCT International Application
5. PCT National Phase Application
6. Patent of Addition
7. Divisional Application

**I’ve written points to remember in the same order as the title above**

1. TEMPORARY’ FIRST TO FILE, CLAIMING PRIORITY, 12 MONTH VALIDITY, NEEDS TO INCLUDE BRIEF EXPLANATION ABOUT THE INVENTION
2. ORDINARY-DIRECT FILING- NO CORRESPONDING PROVISIONAL SPECIFICATIONS  
SUBSEQUENT FILING- COMPLETE SPECIFICATION  
CLAIMING PRIORITY

3. CAN CLAIM PRIORITY IN ALL CONVENTION COUNTRIES, FIRST FILE FROM IPO ONE YEAR PRIOR
4. GOVERNED BY PATENT COOPERATION TREATY, IN 142 COUNTRIES, 30-31 MONTHS TO ENTER VARIOUS COUNTRIES

- ◆ An applicant from India can file this application at:
  - ◆ The **Indian Patent Office (IPO)**, which acts as the receiving office.
  - ◆ The **International Bureau of WIPO**, either after availing a foreign filing permit from IPO or **after six weeks and 12 months of filing an application in India.**

5.

- ◆ a one-time submission to apply for a patent through member states of the Patent Cooperation Treaty (PCT).
- ◆ It is considered essential for an applicant to file a **national phase** application in each of the country wherein they would like to protect their invention
- ◆ The time-frame for filing the same is scheduled within 31 months from the priority date or the international filing date

## Patent of Addition

- ◆ This application must be filed if the applicant discovers that he has come across an invention which is a slight modification of the invention which has already been applied for or patented by the applicant.
- ◆ It can only be filed if the invention doesn't involve a substantial inventive step.
- ◆ A patent of addition is only granted after the grant of the parent patent, and hence no separate renewal fee should be remitted during the term of the main patent.
- ◆ Shall be granted for a term equal to that of the patent for the main invention, and therefore expires along with the main patent.
- ◆ The date of filing here shall be the date on which the application for patent of addition has been filed.

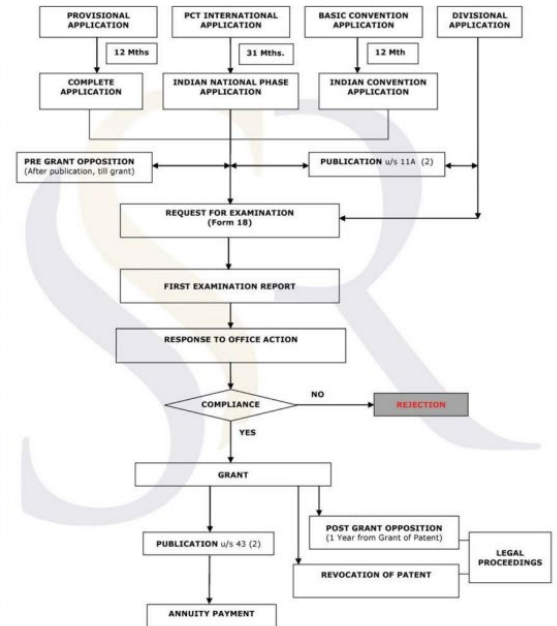


# Divisional Application

- ◆ An applicant may choose to divide an application and furnish **two or more applications** if a particular application claims for more than one invention.
- ◆ The priority date for these applications is similar to that of the parent application.

## Patent Process

- ◆ Stages from Filing to Grant
- ◆ Filing
  - ◆ Once filed it is published 18 months after the date of filing or date of priority
- ◆ Publication
- ◆ Examination
  - ◆ This is not initiated unless a request has been filed with the PO
- ◆ Grant
  - ◆ If the patent is found in order of grant, the same is expedited with the seal of the PO & published in the Patent Journal & Letters Patent & granted for a term of 20 yrs
- ◆ Renewal.



## Reading patents

- ◆ Indian system
- ◆ 12 characters fixed length numeric standard Patent Application format

◆ [LecturePatent 22\IN202041016724A.indiapatent.pdf](#)

<https://www.stratjuris.com/new-numbering-system-for->

### New Numbering Format for Patent Applications in India

**Format:** YYYYJTNNNNNN


Where,

- "YYYY" denotes four digit fixed length "Year of filing"
- "J" denotes fixed length single digit "Jurisdiction" in numerals (1 for Delhi, 2 for Mumbai, 3 for Kolkata, 4 for Chennai)
- "T" denotes fixed length single digit "Type of Application" in numerals:
  - 1 for Ordinary
  - 2 for Ordinary-Divisional
  - 3 for Ordinary-Patent of Addition
  - 4 for Convention
  - 5 for Convention-Divisional
  - 6 for Convention-Patent of Addition
  - 7 for PCT NP
  - 8 for PCT NP-Divisional
  - 9 for PCT NP-Patent of Addition
- "NNNNNN" denotes 6 digits fixed length common continuous running serial number applicable for all Patent Offices in India

Thus, the first application (Ordinary) filed in Delhi in the year 2016 would be numbered as 201611000001. If second application is filed from Mumbai as "Convention" application in the year 2016, it would be numbered as 201624000002.

The "NNNNNN" series of applications shall be unique and sequentially incremented for all the four patent offices in the order of their filing. Date of Application shall accompany the Patent application number in the following format: YYYY/MM/DD.





US009776893B2

<p>(12) <b>United States Patent</b> <b>Wiemers et al.</b></p> <p>(54) <b>MOBILE STATION FOR DIAGNOSING AND MODELING SITE SPECIFIC EFFLUENT TREATMENT FACILITY REQUIREMENTS</b></p> <p>(71) Applicant: <b>Rockwater Resource, LLC</b>, Denver, CO (US)</p> <p>(72) Inventors: <b>Reginald A. Wiemers</b>, Littleton, CO (US); <b>Robert Kohlheb</b>, Csersegtomaj (HU); <b>Bardia B. Khalili</b>, Denver, CO (US); <b>Gyorgy Lipovszki</b>, Budapest (HU); <b>Peter H. Zahn</b>, Littleton, CO (US)</p> <p>(73) Assignee: <b>Rockwater Resource, LLC</b>, Denver, CO (US)</p> <p>(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 372 days. This patent is subject to a terminal disclaimer.</p> <p>(21) Appl. No.: <b>14/120,985</b></p> <p>(22) Filed: <b>Jul. 18, 2014</b></p> <p>(65) <b>Prior Publication Data</b></p>	<p>(10) Patent No.: <b>US 9,776,893 B2</b></p> <p>(45) Date of Patent: <b>*Oct. 3, 2017</b></p> <p>(58) <b>Field of Classification Search</b> CPC ..... B01D 61/02; B01D 61/04; B01D 61/12; B01D 61/16; B01D 61/22; B01D 61/58; (Continued)</p> <p>(56) <b>References Cited</b></p> <p style="text-align: center;">U.S. PATENT DOCUMENTS</p> <p>4,383,920 A 5/1983 Muller et al. 4,999,116 A 3/1991 Bowers (Continued)</p> <p style="text-align: center;">FOREIGN PATENT DOCUMENTS</p> <p>GB 2284906 6/1995</p> <p style="text-align: center;">OTHER PUBLICATIONS</p> <p>Publication: Chao Chen et al., "Comparison of seven kinds of drinking water treatment processes to enhance organic material removal: A pilot test", Science of the Total Environment, vol. 382, pp. 93-102, Published May 23, 2007.* (Continued)</p> <p>Primary Examiner—Joseph Drodge (74) Attorney, Agent, or Firm—Harold A. Burdick</p>
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- ◆ Reading a US patent
- ◆ Issued patents generally begin with "US." That is followed by the one-to-seven-digit patent number.

## DBs for patents

[Patent Public Search](#)

[Patent Official Gazette](#)

[Common Citation Document \(CCD\)](#)

[Search Published Sequences](#)

[Patent Assignment Search](#)

## COPYRIGHTS

Copyright is a type of intellectual property that gives an originator the exclusive and assignable legal right, for a fixed number of years, to print, publish, perform, film, or record literary, artistic, or musical material

- Copyright laws allow products of creative human activities, such as literary and artistic production, to be preferentially exploited and thus incentivized.
- Copyright has developed into a concept that has a significant effect on nearly every modern industry, including not just literary work, but also forms of creative work such as sound recordings, films, photographs, software, and architecture
- 1. In case of literary, dramatic or musical work:
  - a) Reproducing the work in any material form which includes storing of it in any medium by electronic means,
  - b) Issuing copies of the work to the public which are not already in circulation,
  - c) Performing the work in public or communicating it to the public,
  - d) Making any cinematograph film or sound recording in the respect of work,
  - e) Making any translation or adaptation of the work.
- 2. In case of a computer programme:
  - a) To do any of the acts specified in respect of a literary, dramatic or musical works,
  - b) To sell or give on commercial rental or offer for sale or for commercial rental any copy of the computer programme.
  - Example: A programmer automatically owns the copyright of any program they write (it does not need to be applied for) and it lasts until 70 years after the death of the author.

➤ 3. In the case of artistic works:

- a) To reproduce the work in any material from including storing of it in any medium by electronic or other means, depiction in three dimensions of a two dimensional work and depiction in two dimensions of a three dimensional work,
- b) Communicating the work to the public,
- c) Issuing copies of work to the public which are not already in existence,
- d) Including work in any cinematograph films,
- e) Making adaptation of the work, and to do any of the above acts in relation to an adaptation of the work.

Adaption in each category shall be explained\*

➤ 4. In the case of cinematograph film:

- a) To make a copy of the film, including photograph of any image forming part thereof or storing of it in any medium by electronic means or otherwise.
- b) To sell or give on commercial rental or offer for sale or for such rental, any copy of the film,
- c) To communicate the film to the public

➤ 5. In the case of sound recording:

- a) To make any other sound recording embodying it “including storing of it in any medium by electronic or other means,
- b) To sell or give on commercial rental or offer for sale or for such rental, any copy of the sound recording,
- c) To communicate the sound recording to the public.



## **TERM**

protection for the life time of the author plus 60 years beyond i.e. 60 years after his death.

In case of joint ownership, its till the last one's dead

The act has given broadcasting reproduction right to every broadcaster which is valid for 25 years from the beginning of the calendar year

### ► **Licenses by Owners of Copyright:**

- Section 30 of the act empowers the owner of the copyright in any existing work or the prospective owner of the copyright in any future work to grant any interest in the right by license in writing by him or by his duly authorized agent.
- However, in the case of a license relating to copyright in any future work, the license shall take effect only when the work comes into existence.

**Explanation.—** Where a person to whom a licence relating to copyright in any future work is granted under this section dies before the work comes into existence, his legal representatives shall, in the absence of any provision to the contrary in the licence, be entitled to the benefit of the licence.

# INTRODUCTION

- What is Patinformatics?

- the science of analysing patent information to discover relationships and trends
- Patinformatics is an emerging science which involves **analysis** of a set of **patent data** to **map relationships** and trends which would be otherwise difficult to do so when dealing with **patent documents on a one-to-one basis**.
- The use of patent information and management has become a critical part in management of Research and Development (R&D), a tool for creative thinking, competitor's monitoring, technology assessment, new venture evaluation, input for licensing strategy, supporting mergers & acquisitions and human resource management.
- Alternatively it may be defined as a generic term that encompasses the design, creation, organization, management, retrieval, analysis, dissemination, visualization and use of patent information
- The use of patinformatics tools are in the updation, validation of technical and scientific information and their exploitation for the betterment of innovation.

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)	
(19) World	<b>Classifications</b>
(43) International Publication Date 5 July 2007 (05.07.2007)	(10) International Publication Number <b>WO 2007/076115 A2</b>
(51) International Patent Classification: A01H 5/00 (2006.01) C12N 15/82 (2006.01) C12N 9/10 (2006.01) C12N 5/04 (2006.01)	5727-107th Street, Edmonton, Alberta, T6G 2B9 (CA); <b>THEODORIS, George</b> (US); Vallejo, CA 94591 (US).
(21) International Application Number: PCT/US2006/049241	(74) Agents: AMH, Lisa, A. et al.; M 425 Market Street, San Francisco, CA 94102-1082 (US).
(22) International Filing Date: 21 December 2006 (21.12.2006)	<b>Filing date</b>
(25) Filing Language: English	(30) De
(26) Publication Language: English	AT
(30) Priority Date: 06/753,818 23 December 2005 (23.12.2005) US	CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GR
(71) Applicant (for all designated States except US): ARCADIA BIOSCIENCES, INC. [US/US]; 302 Coanville Place, Suite 200, Davis, CA 95616 (US).	<b>Priority data</b>
(72) Inventors; and	IT
(73) Inventors/Applicants (for US only): KRIDEH, Jeon [US/US]; 538 Reed Drive, Davis, CA 95616 (US); DEPAUW, Mary [CA/CA]; 9508-145th Street, Edmonton, Alberta, T5N 2W7 (CA); SHRAWAT, Ashok, K. [IN/CA]; Apt. 2011, 27 Suddheback Road, Edmonton, Alberta, T6T 4M4 (CA); GOOD, Allen, G. [CA/CA];	<b>Applicant(s)</b>
	GM, KE, LS, MW, MZ, NA, SD, SI, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
(54) Title: NITROGEN-EFFICIENT MONOCOT PLANTS	<b>Title</b>

# MACRO- LEVEL FORMS OF PATENT INFORMATION ANALYSIS

## Patent intelligence

- The use of patent information to identify the technical capabilities of an organization and the use of that intelligence to develop a strategy for strategic technical planning

## Patent mapping

- Sometimes described as white space mapping, which uses published patent data to create a graphical or physical representation of the relevant art pertaining to a particular subject area or novel invention

## Patent citation analysis

- the study of patent citations for potentially determining a patent's value or, perhaps more reliably, the identification of potential licensing partners or leads based on the citation of an organization's patents by another company in the same or a completely different market space

Patinformatics can also cover additional applications of patent information involving a subsequent analysis step. The key underlying property in each of these diverse areas is the analysis step.