PATENT INFRINGEMENT ANALYSIS

Project report submitted in partial fulfilment of the requirement for the degree of

BACHELOR OF TECHNOLOGY

IN

COMPUTER SCIENCE ENGINEERING

By

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UNDER THE GUIDANCE OF

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DECLARATION

I hereby declare that the work reported in the B.Tech Project Report entitled **"PATENT INFRINGEMENT ANALYSIS"** submitted at **Jaypee University of Information Technology, Waknaghat**, India is an authentic record of my work carried out under the supervision of Dr. Pardeep Kumar. I have not submitted this work elsewhere for any other degree or diploma.

Hritik Negi

161295

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Dr. Pardeep Kumar

ACKNOWLEDGEMENT

This training opportunity at GreyB Services is a great chance for learning and professional development. I would like to express my deepest gratitude and special thanks to the founders and Directors of the company Mr. Deepak Syal and Mr. Chakshu Kalra who in spite of being extraordinarily busy with their duties, took time out to hear, guide and keep me on the correct path of learning and developing.

I express my deepest thanks to Mr. Muzammil Hassan, Manager, Patent Monatization Team for taking part in useful decision & giving necessary advices and guidance and arranged all facilities in the office.

I also pay my gratitude to Mrs. Vincy Khandpur, Team Lead, Patent Monetization Team for her supervision and invaluable guidance.

It is my radiant sentiment to place on record my best regards, deepest sense of gratitude to my mentor, Mr. Aadarsh Sharma, Research Associate for his careful and precious guidance which were extremely valuable for my training.

I would like to acknowledge guidance of my institute mentor, Dr. Pardeep Kumar who constantly guide me during my training and suggest me to improve on every aspect.

CERTIFIATE OF TRAINING

GREYB SERVICES

Date: May 21st, 2020
Ref. No. GB/OP-HR/TRA-045

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. Hritik Negi is working as a Trainee Research Analyst with our organization since Feb, 2020 to till date.

During internship with GreyB, Hritik has worked on multiple Infringement Analysis Projects but due to confidentiality issues we are unable to disclose project details.

This document is confirming his successful training completion with us.

Yours sincerely,

Pooja Sehgal
Sr. Manager HR

LIST OF ACRONYMS AND ABBREVIATIONS

1. SEP- Standard Essential Patent
2. 3GPP- 3rd Generation Partnership Project
3. DIA- Detailed Infringement Analysis
4. eVTOL- Electronic Vertical Take-Off and Landing
5. ARIB- Association of Radio Industries and Businesses
6. ATIS- Alliance for Telecommunications Industry Solutions
7. CCSA- China Communications Standards Association
8. ETSI- European Telecommunications Standards Institute
9. TSDSI- Telecommunications Standards Development Society of India
10. TTA- Telecommunications Technology Association
11. TTC- Telecommunication Technology Committee
12. IP- Intellectual Property

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CHAPTER 1
PROFILE OF COMPANY

1.1 About GreyB Services

GreyB is a professional services organisation. GreyB has its offices in Singapore and India (Mohali & Gurgaon). The company works both on offsite and onsite model. It aids further firms to produce worth through their innovation and IP. Greyb possess a wide range of customers with a broad portfolio composed of legal firms, businesses, software creation agencies, R&D divisions, in-house IP offices, patent committees, patent lawyers, IP investment houses, venture capital groups, investment firms, IP-based investment bankers, with research organizations.

The business has a large number of product consulting consultants. The information gathering expertise and experience of these technology management consultants was vital for the efficient development, management and monetizing the Intellectual Property. The company offers a wide variety of product management consultancy consultants. The data collected expertise and experience of these new tech investment bankers was essential to the effective developing, managing and monetizing the Intellectual Property.

1.2 Goal

GreyB strives to support customers with the customized study and patent review. The firm provides provides the customers through academic and business knowledge to and their threat of investing in research. In this researchers are professionally qualified in the area of industry. Analysis of our expertise in information technology, electrical and mechanical industrial equipment, material sciences and metal alloys, software, advanced tech, white goods , consumer items, bioengineering, medical devices, chemical material science, petroleum & gas, chemistry, medical equipment, medical care, industrial output and microelectronics.

1.3 Team Work at GreyB

The GreyB team has a user experience and a task-delivery process which makes it easy to optimize the execution of data contact. It aims more to explain the company objectives / queries underlying will appraisal, customized specifically to the product kit, also included reviews. All of this mix of

consumer engagement, project-based reach of analytical testing and product efficiency allows company to deliver competitive customer services.

1.4 Work Culture at GreyB

The firm operates through licensed intellectual property lawyers, software creation marketing personnel, patent law companies (EPO, USPTO protocols), corporate IP, development and product designers, patent departments, code transition departments, compliance consultants, stakeholders and IP traders.

CHAPTER 2

INTELLECTUAL PROPERTY

2.1 Definition

The IP deals with patents, trademarks, copyrights, design rights and other kinds of intangible assets. Such assets emerge throughout their truest sense mostly from creative works. Such assets does not have any physical reality, as well.

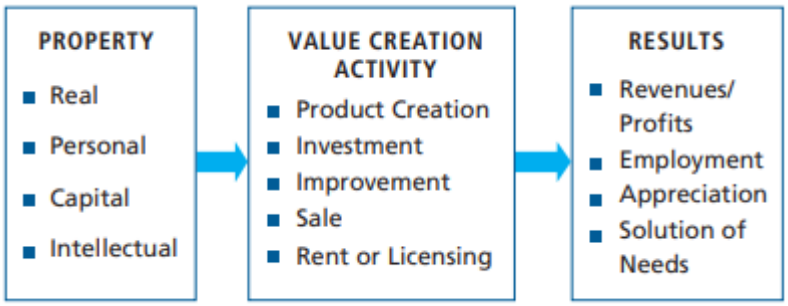


Fig. 2.1 Intellectual Property

Unlike any other forms of assets, Intellectual Property may be purchased which will produce further profits. The IP shall therefore be treated as an advantage. The IP is generally known to be the result of the purchase. It continues to generate a payback of one kind or another differs from other types of possession, as IP does not have a measurable nature and human experience, knowledge and intelligence are understood. There is a particular form of intellectual property. There are distinct intellectual property rights, so that each IP will have its own peculiar policies. IP can be split into 2 groups: Copyright & Intellectual Property. Intellectual property is generally meant specifically for the advancement in manufacturing, the business industry and trademarks such as inventions, concept licenses, licensed trademarks and trade secrets. The following are the IP types:

2.2 Types

1. Patent: It protects the invention which is novel, non-obvious and has some industrial applicability.

2. Design: It upholds the exterior look of an item.

3. Copyright: It preserves the creation of a concept, such as video, publishing or recording cultural, creative or literary content.

4. Trade Secret: This prevents the industrially valued data of the institution which is kept private besides particular purposes.

5. Trademark: It is a word, sign or some symbol legally attached, or established for use of signifying an organisation.

2.2.1 Patent

Any patent is really a legal instrument that assigns the holder some exclusive power to regulate the usage of the innovation, just like specified in the patent claims, inside one limited region and period, by, inter alia, prohibiting anyone from producing, possessing or selling the invention except his approval. Consider, for instance, the patents issued for a smartphone battery which lasts endlessly, a vaccination to protect against Covid-19, or a revolutionary chemical that will disinfect the contaminated water.

2.2.1.1 Purpose of Granting Patents

In order for the security of the inventor's work in the form of a patent, the inventor / owner will hand over to the patent office and thereby to the community the full definition of his innovation and the mode of usage. In this way, the patent scheme aims to promote development by an incentive program that facilitates the exchange of valuable science and technological expertise in return for prudential regulation. Any patent can be regarded as a privilege given to the innovator / maker of an innovation that safeguards the patent by prohibiting anyone from creating, utilizing, manufacturing or offering for sale without the permission of the patent owner.

The innovation that is patentable may be an end produce or could be a procedure that provides a new practical key to the problematic situation. This could be a different way of doing something, a design of a specific entity, or a technological change in how other items used to function earlier.

Where a patent is issued, legal protection shall be extended for a term of twenty years from patent approval’s date. It may be expanded to 20 years unless the applicant charges patent licensing payments on a periodic basis, or the patent is considered expired, which ensures no lawful security.

2.2.1.2 The Value of a Patent

When filing a patent, could not only you prohibit someone from stealing the conception of the product, they will even commercialize the invention and collect revenue off it by selling the intellectual property rights to 3rd parties. That means they will legally make profits out of patents.

2.2.1.3 Reasons for Patent

The patent consists of four main motivations mentioned in patent organisation:

a) Invent in the first position
b) The announcement of the innovation once it has been developed

c) To invest the money required to perform experimentation
d) To produce and market it.
e) To design and make better the earlier patents.

2.2.1.4 Legal Requirement for Patentability

In order to patent an invention, the invention must fulfil several pre-defined requirements. The requirements can be listed as novelty, utility and non-obviousness. Some other legal requirements are also required, such as the need of enablement of disclosure, etc.

1. Novelty

The novelty is the most important aspect of the criteria required for the award of a patent. It is at the core of the criteria for the award of a patent. An innovation must be new, or it cannot be copyrighted. The technology could not be made accessible in the public domain or exposed to others. It should be noted that, in the case of major nations, the innovation should be novel during the point of submission of the application of the patent, whereas in most nations, including the United States, the innovation must be novel. The previous data or publishing of the very similar innovation can nullify ingenuity. If the innovation is not unique, it could not be protected. Although novelty seems to be a main aspect for patent protection, the configuration of newness varies by region. The novelty should not mean that it should be pioneering-although only simple items may be helpful although fresh. Most of the nations have an overwhelming need for innovation. The need of total creativity implies innovation at the global platform. The prerequisite for innovation at global level applies to the declaration that is available somewhere in the globe and that is capable of showing a legitimate prior art against that same patent application. The acts of the actual creator may be considered as legal precedence. Consequently, before submitting a patent, the patent holder will not allow the public declaration of his invention. In certain countries in the planet, the development of innovative and valuable technology eliminates the likelihood of a good award of an innovation patent. Throughout nations such as the United States, the patent signer may comply with the uniqueness provisions of its patent by making an application within one year of the announcement of the innovation here to public or just by selling the innovation also to marketplace. That duration of one year prohibits the creator's self-disclosure of his innovation to the public from being a prior art record against the patent filing since a set time period. It doesn't even signify even whether a creator is willing to report his innovation to the public. Eventually, a valid patent application may be lodged in a nation that has an another-year span. Evidently, this will not imply that the application filed might be consistently submitted in a nation that did not seem to have a timeframe of one year. Exercises including official records and

previous art vary by region. Every patent would then be checked and the laws will be fully known before the patent is submitted.

2. Utility or Industrial Applicability

In order to be awarded a license, the design must have certain commercial applicability. In technical language, this is related to as an infrastructure or commercial use. The two words are given, but they do not have the same sense. A patent may not be granted unless the innovation in question does not demonstrate its function. Sometimes in regions of the world, patent system may take into account ethical implications such as the refusal to grant patent rights.

This is not mandatory for an innovation to demonstrate any supremacy over current goods or methods in order to meet with the conditions of the patent for usefulness. The criteria for use only includes the execution of the roles alluded to in the patent by the inventor.

The condition of industrialized validity is met by the fact that the patent claims agree with a specific format. Let's all appreciate this by way of an illustration. Let us assume that the investigator of the patent finds out that, by realigning the patent claims, the tool alluded to at that period by the patent agent will support the industrial application.

Essentially, this same innovation does not have to convey commercial usefulness in required to conform with the prerequisite of usefulness or applicable standards. We might take a scenario. Let us imagine a scenario in which a creator has discovered a new diamond product. Assume this one has been found that the diamond has an individually and separately that prevents water from melting into the ice. The inventor discovers that his work will be used in the plumbing industry. The technology shall be implemented in such a manner that the water pipe lines with diamonds keep the pipe lines from fracturing in cold conditions. Evidently, this innovation is now very pricey to adapt in daily living. Thus, use of the diamonds in water pipes never could cooperate with the utility prerequisite.

3. Inventive Move / Not common step

The very last but not insignificant prerequisite that a patent be issued is non-obviousness. It should to be noted that, in several nations, the criterion is considered an imaginative move. This phase of the innovation must not have been apparent to any ordinary talent in the craft. In simplistic words, it is evident that a condition which is not protectable is that every people of average ability in the related science / technological area is not capable of gathering and putting together divergent pieces the well-known data and instead arriving at the product of the innovation. In every nation, the amount of time

of this phase varies. This should be remembered, though, that the date is typically fixed at the period of filling by the claimant or at the time of creation.

2.2.2 Trade mark

A trade mark is an indication which must be identified as a structure or appearance that distinguishes the services or goods to the target firm from same brands of another firm.

The trademark could be comprehended mostly as label which could be used to make a distinction the services or goods of one's company from those of someone else.

The trade mark may be physically portrayed in the shape of an entity emblem or a logo.

By means of a licensed trade mark, someone could shield his / her name by preventing someone from utilizing his / her name or symbol.
Usually, the trade mark obtained lasts longer than extended for a period of ten years. Since registration of a trademark is a kind of IP, it can be authorized or transferred to someone else.

What is the benefit in registering a trademark?

When a trade mark is not licensed, the company could not count on the protection under the civil law act of transfer to defend the trade mark from duplication or misuse.

Nevertheless, once a trade mark is licensed, the corporate company shall have the contractual control over the recorded trade mark. The trademarks complements importance to one's company as the trademark is being used for the defense of profit margins. It may also assign a trademark to a different foreign entity, including a franchisor, or even a trademark may be licensed for a stated fee. Somebody else does have the alternative from using its trademark to assist users boost funding of one’s company.

As a matter of fact, Singapore doesn't really make it compulsory for a trade mark to be registered.

2.2.3 Copyright

Copyright could be regarded as just a new guise and "work of writings." The developer of a copyright holder known to be a creator. Several instances of licensed activities that include: photographs, sculptures, poetry, essays, plays, dancing, and far more. In addition, copyrights is also applicable to certain technological problems. Such systems provide an aspect of uniqueness, like scripting tools, technological requirements, and relevant records.

A main difference here between IP and copyrights is that copyrights may not require approval by a regulatory agency. Thus IP privileges ought to be expressly recorded and issued by the state power. When we think about philosophy, anyone may file a patent / trademark lawsuit. In fact, it must be remembered that only experts, including patent officers and patent lawyers, are drafting a patent proposal. Such individuals are submitting a patent claim.

- A copyright provides the inventor of an authentic effort exclusive rights. These exclusive rights are generally last for a pre-defined time.
- The Copyright doesn't include any specific information or ideas in them. Copyrights are the way or form in which ideas can be voiced

2.2.3.1 Benefits of Copyrights

They preserve the transmission of thoughts (for example, vocabulary and drawings). Ideologies aren't really covered under their own. The foregoing could be covered through law for copyright:

Artistic plays (e.g. written books, origin code for computer algorithms)

2.2.3.2 Things not comprised in copyright

Specific matters not really protected by copyright shall involve: processes, theories, techniques or innovation and development.

2.2.4 Rights for Industrialized Design

The architectural layout privilege is another intellectual property privilege that covers the graphic layout of non-utilitarian objects. The industrial setup consists of both the arrangement and arrangement of the template or paint, the development of the form or the composition of the pattern and the colour in 3d model that comprises of another sculptural meaning. The design process might be a 2D or 3D template that is used for manufacturing of a good, manufactured products or craftsmanship.

The freedom to product design shall cover the graphic design of items that just aren't strictly functional. In architectural layout comprises of the formation of a structure, arrangement or configuration of a design or colour, or a mixture with a design and paint in a 3D type representing a structural meaning. The architectural template may involve a 2D or 3D design utilized to manufacture a component, an engineering material, handcraftsmanship and many more.

2.2.5 Trade Secret

- Trade secret is regarded as a method, procedure, process, arrangement, device, technique or collection of knowledge that is not commonly established or easily provable and that allows a company to achieve competitive benefit from rivals or consumers.

- Company secrets will have a really lengthy existence. The history of a trade secret lasts forever until the trade secret is released to the world.

Trade secret is the method, process, device, collection, or sequence of information that is not commonly recognized or easily recognizable.

CHAPTER 3
PATENTS

3.1 Types of Patents that are issued:

1. Utility patents can be given to any person that discovers the suitable approach, system, product of manufacturing or configuration of material. Instances: optical cables, electronic equipment, or narcotics.

2. Design Patents can indeed be given to someone who discovers a modern, unique and sculptural concept about an item of production. Instances: a feel of even a running boot, a cycling jacket, and the characters for movie Avengers.

3. Plant patents can be given to one who discovers or develops and reproduces some unique and novel plant type.

Generally, a function patent involves the method the product will be utilized and functions, and a layout patent covers the way the document appears. All other layout and usefulness patents might also be granted in respect of an article if they are innovative, within both their usefulness or in their decorative looks.

A preliminary application is a really basic patent filing comprising just a summary of an innovation. A non-provisional filing is indeed a patent submission in its entirety, containing vows, sketches and statements. We might have to submit a non-provisional application afterward 1 year following the submission of the filing date.

3.2 How Patents look like?

The presentation of the patent is addressed as follows:

• Applicant: contains the names of the claimant seeking to preserve the invention;

• Inventor: contains the names of the inventor who made the invention.

• Description: comprises of the classification of the patent claims for a clearer understanding of the patent claims;

• Claims: are all statements that are made to protect by the patent law.

• Citation and references: In this section the patent citations and references are mentioned.

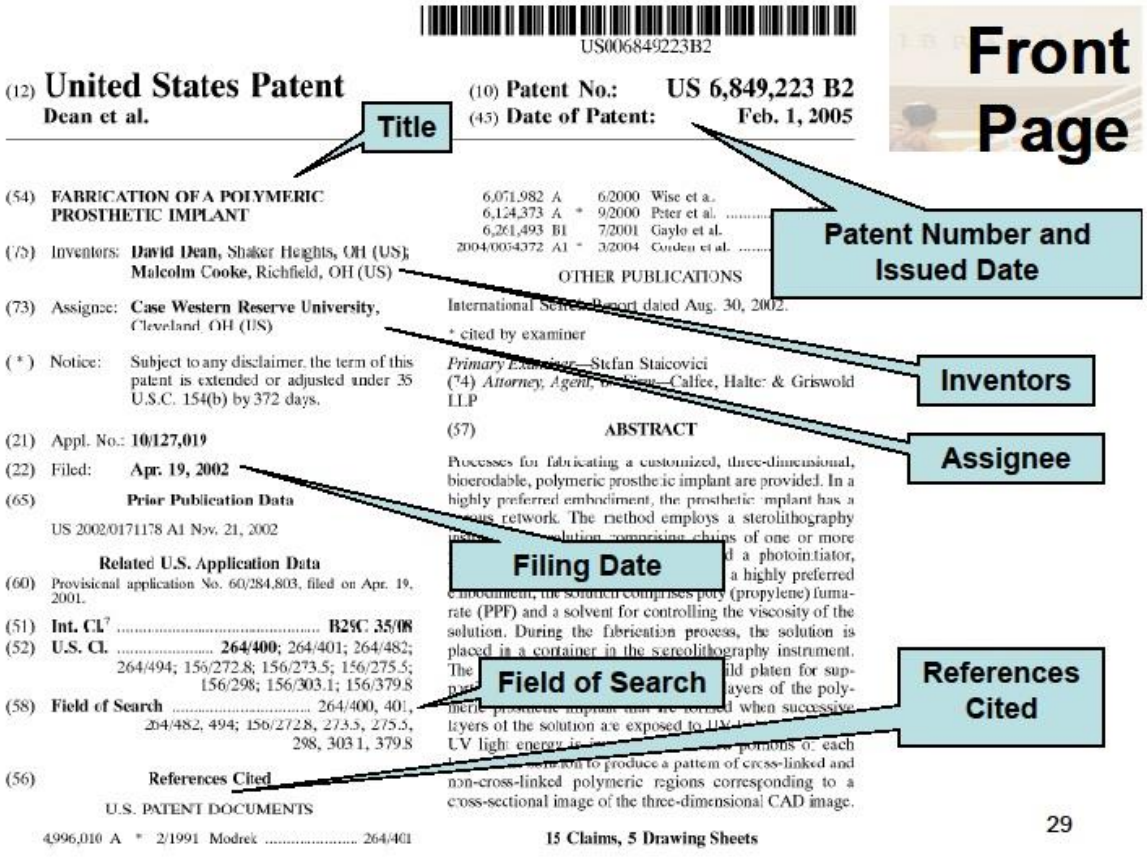


Fig. 3.1 Parts of a U.S Patent

3.3 Patent Laws

Patent laws define the patent's information where the patents are being awarded and also the requirements on patent protection. The legislation states that the USPTO is liable for administering the laws pertaining to the award of inventions.

Such regulations cover the area that is common but which is protectable and all the circumstances whereby a patent may be awarded.

3.4 Patent Analysis through File Wrapper

A file wrapper is the folder. This folder is meant to collect papers related to specific application and they are maintained in it. It consists of a comprehensive record of proceedings in the PTO. These proceeding are from initial filling of the patent to the application for granted patent. The patent file wrapper consists of each communication happened between the inventor/attorney and patent office.

In the terminology of the legislation, any individual that innovates or develops some unique and effective method, system, manufacturing or preparation of matter, or some unique and effective invention thereof, that receive a patent, conform to the terms and provisions of the law. A term "method" is described by legislation as a procedure, action or system which, in particular, involves industrialized or technological methods. No comment needed for the word "machine" seen in the statute. This same word "manufacture" pertains to publications which are created and usually involves all publications of production. The word "composition of material" applies for chemical formulations that can contain blends of chemicals and also some novel chemical substances. Such types of subject material, grouped combined, cover virtually and everything that is produced by human but the methods for producing the things. Addition of excess materials.

The patent statute states that the subject-matter would have to be "practical." Under this context, the word "usable" applies to the requirement that perhaps the subject-matter would have a practical intent which thus requires usefulness i.e. that since a computer that shouldn't work for the stated function may not be deemed usable and will therefore not be awarded a patent.

Definitions of the legislation even by judiciary further established the boundaries including its sphere of subject-matter that may be copyrighted, and moreover it is being claimed that only the rules of physics, observable processes and theoretical theories really aren't protectable.

The patent will never be secured on the grounds of a specific concept or recommendation. This same patent application on a new computer, production, etc., as it has been said, and not just on the idea or proposal of a new device. A detailed explanation of the specific computer and perhaps other subject-matter from which a patent is obtained is needed.

3.4.1 How to perform file wrapper analysis?

As per the PTO, the "file wrapper" is just the directory where only records for either a given program are stored and preserved. It provides a full documentation of the litigation of the PTO after the registration of the preliminary patent petition in favor of the patent granted.' A patent file wrapper includes all correspondence with the applicant (or his attorney) with the PTO.

It contains certain step taken by the Company, the order for approval, the pledge and also the document, as well as the details of the patent investigator’s consultation.

The meaning of a file wrapping will never be exaggerated. U.S. Patent and Trademark Office (PTO) notes that the official information of the enforcement of a patent case in the United States Patent and Trademark Office (PTO) would be more than merely the factual document.

For the existence of the patent, the court report determines the nature of the asserted innovation and the privileges of the patent proprietor. Specifically, the concept of file wrapper estoppel points out how the extent of the patent may be restricted by the details in the file wrapper.

As we get past of ReCaptcha on the website, we get to see a search screen where we need to search the patent for which we wanted to perform file wrapper analysis. For example let us take a patent US6932368 and search out it.

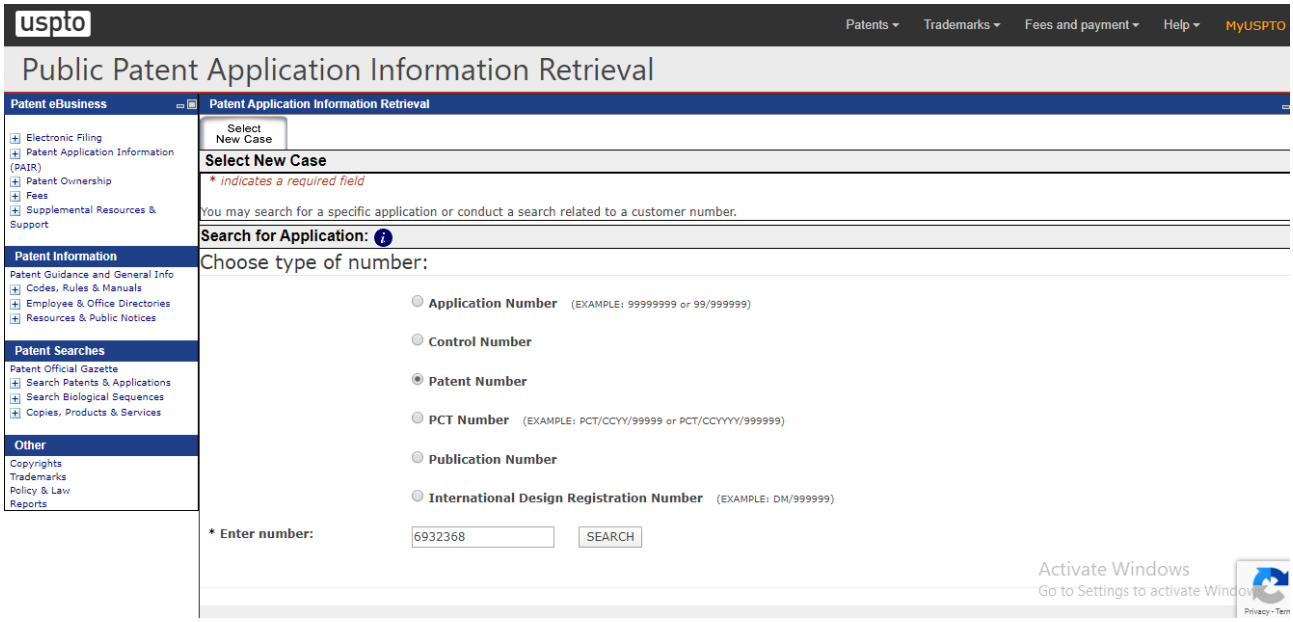


Fig 3.2 Public pair search screen for searching patent US6932368B1

After filling the patent number we are re-routed to Public PAIR record.

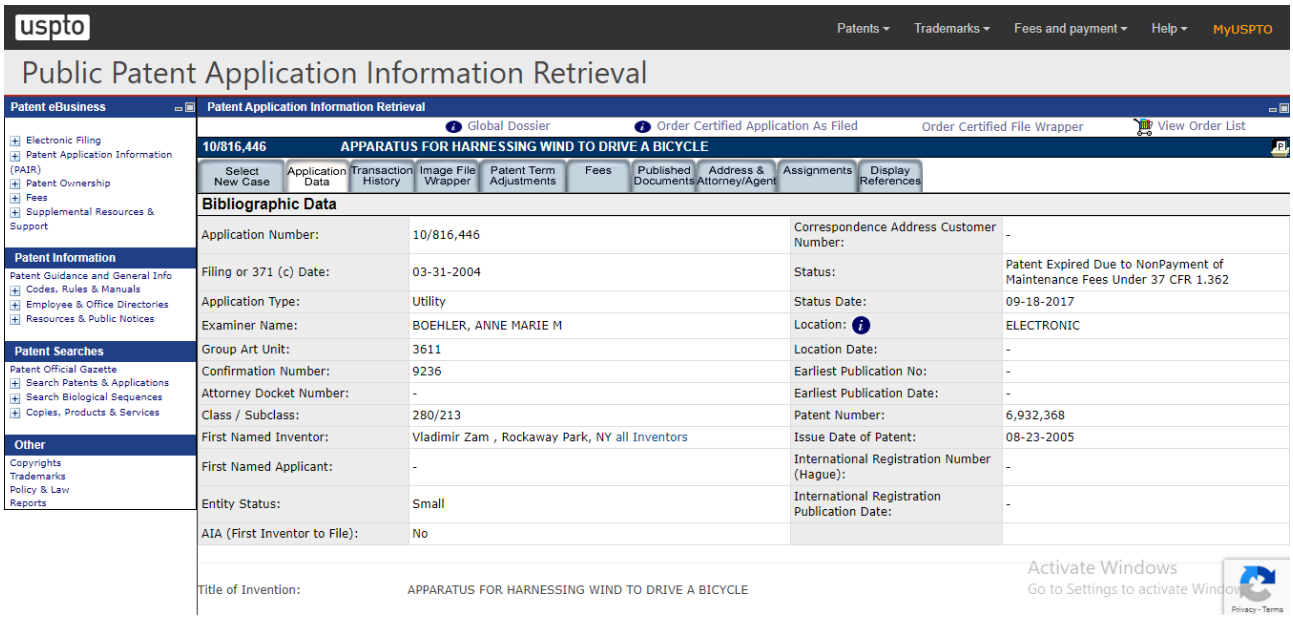


Fig. 3.3 Application data tab for patent US6932368B1

For further information the fees tab is searched. If we click on fees tab a new window opens which is related to the database of USPTO Maintenance. Copy the application number of the patent and search on the search bar. The next opened page looks like the following figure:

Fig. 3.4 Maintenance fee tab for patent US6932368B1

Now let us click on the button which says “Get Bibliographic Data”. By clicking on this button we request to get information about the next date of fess window and the amount of the fee.

Now the Patent Term Adjustment tab is explored.

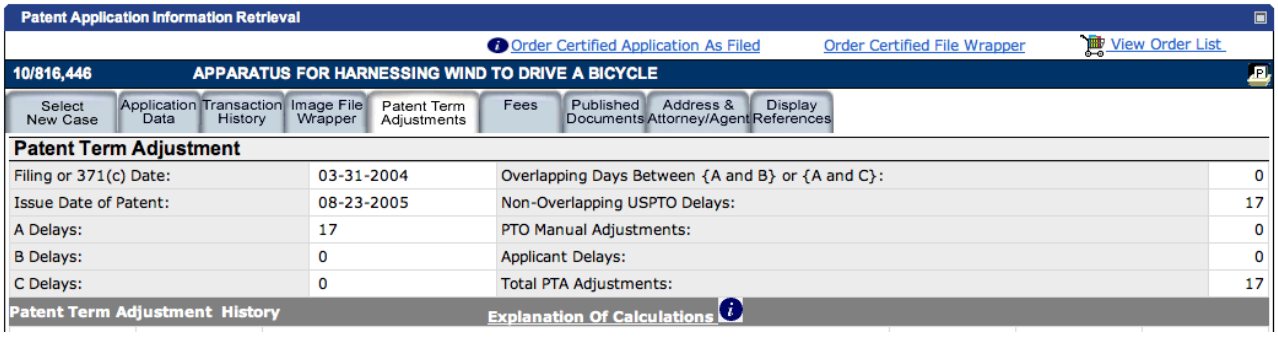
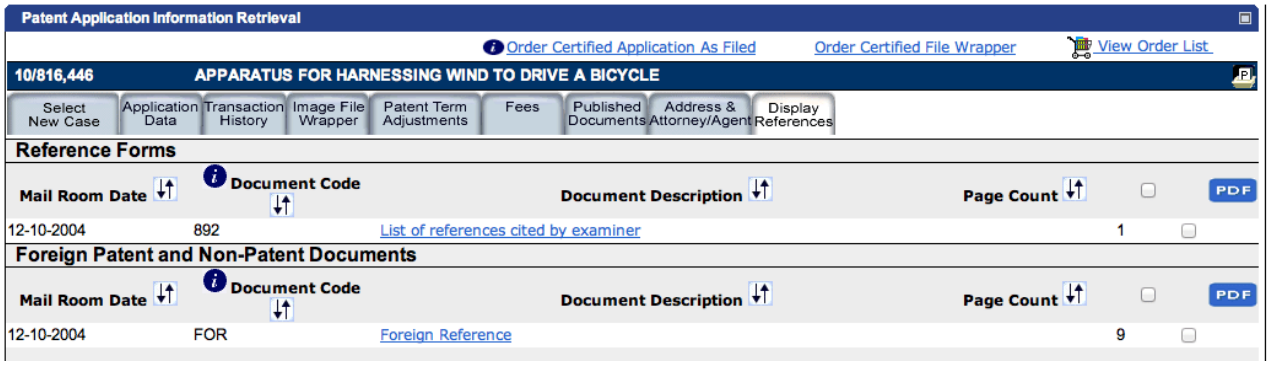


Fig. 3.5 Patent term adjustment tab for patent US6932368B1

Now let us explore Display References tab. This tab shows all the references of the filled patent.



Patent Application Information Retrieval

Order Certified Application As Filed | Order Certified File Wrapper | View Order List

10/816,446 APPARATUS FOR HARNESSING WIND TO DRIVE A BICYCLE

Select New Case | Application Data | Transaction History | Image File Wrapper | Patent Term Adjustments | Fees | Published Documents | Address & Attorney/Agent | Display References

Reference Forms

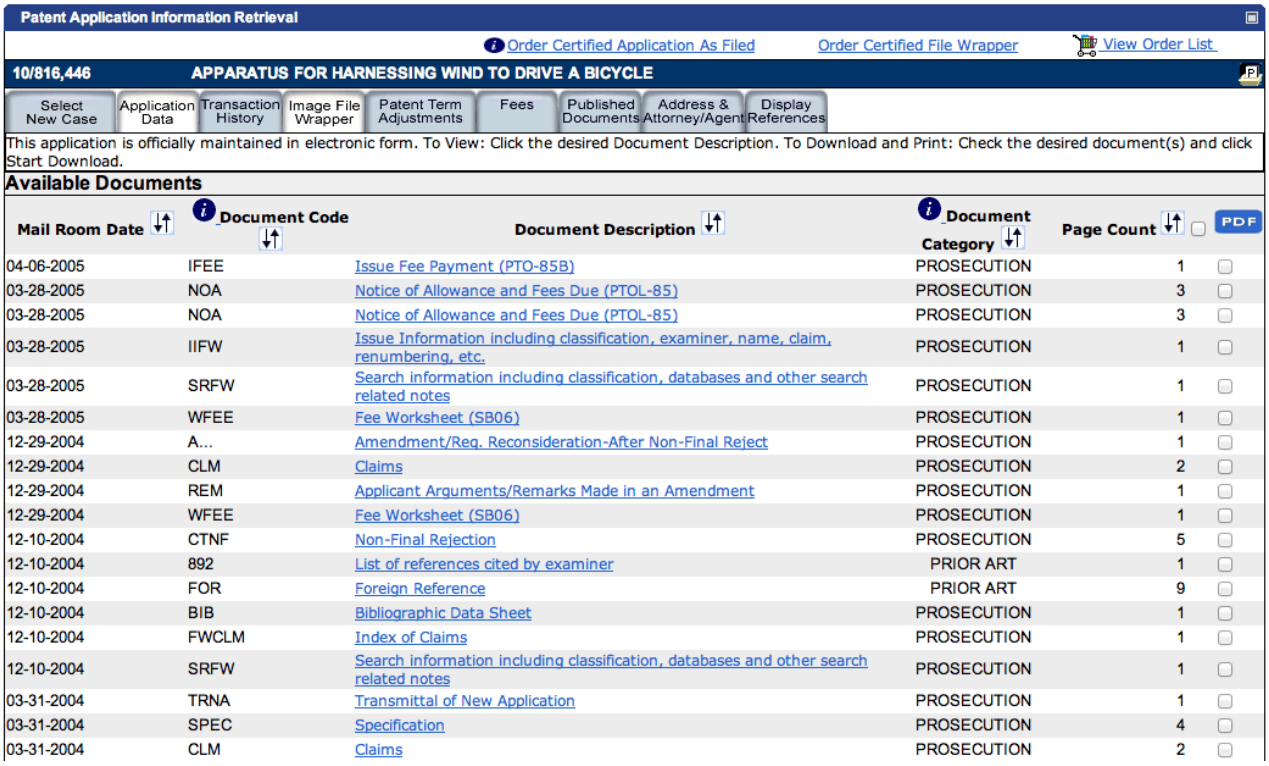
Mail Room Date	Document Code	Document Description	Page Count	PDF
12-10-2004	892	List of references cited by examiner	1	

Foreign Patent and Non-Patent Documents

Mail Room Date	Document Code	Document Description	Page Count	PDF
12-10-2004	FOR	Foreign Reference	9	

Fig. 3.6 Display reference tab for patent US6932368B1

Now let us explore the most important tab- Image File Wrapper. In this tab we can get the knowledge of all the office actions taken.



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10/816,446 APPARATUS FOR HARNESSING WIND TO DRIVE A BICYCLE

Select New Case | Application Data | Transaction History | Image File Wrapper | Patent Term Adjustments | Fees | Published Documents | Address & Attorney/Agent | Display References

This application is officially maintained in electronic form. To View: Click the desired Document Description. To Download and Print: Check the desired document(s) and click Start Download.

Available Documents

Mail Room Date	Document Code	Document Description	Document Category	Page Count	PDF
04-06-2005	IFEE	Issue Fee Payment (PTO-85B)	PROSECUTION	1	
03-28-2005	NOA	Notice of Allowance and Fees Due (PTOL-85)	PROSECUTION	3	
03-28-2005	NOA	Notice of Allowance and Fees Due (PTOL-85)	PROSECUTION	3	
03-28-2005	IIFW	Issue Information including classification, examiner, name, claim, renumbering, etc.	PROSECUTION	1	
03-28-2005	SRFW	Search information including classification, databases and other search related notes	PROSECUTION	1	
03-28-2005	WFEE	Fee Worksheet (SB06)	PROSECUTION	1	
12-29-2004	A...	Amendment/Req. Reconsideration-After Non-Final Reject	PROSECUTION	1	
12-29-2004	CLM	Claims	PROSECUTION	2	
12-29-2004	REM	Applicant Arguments/Remarks Made in an Amendment	PROSECUTION	1	
12-29-2004	WFEE	Fee Worksheet (SB06)	PROSECUTION	1	
12-10-2004	CTNF	Non-Final Rejection	PROSECUTION	5	
12-10-2004	892	List of references cited by examiner	PRIOR ART	1	
12-10-2004	FOR	Foreign Reference	PRIOR ART	9	
12-10-2004	BIB	Bibliographic Data Sheet	PROSECUTION	1	
12-10-2004	FWCLM	Index of Claims	PROSECUTION	1	
12-10-2004	SRFW	Search information including classification, databases and other search related notes	PROSECUTION	1	
03-31-2004	TRNA	Transmittal of New Application	PROSECUTION	1	
03-31-2004	SPEC	Specification	PROSECUTION	4	
03-31-2004	CLM	Claims	PROSECUTION	2	

Fig 3.7 Patent US6932368B1's image file wrapper tab

Copies of court records can be accessed from consumers.

CHAPTER 4

TYPES OF SEARCHES

4.1 Types of Searches

1. Prior -Art Search
2. Landscape Analysis
3. Infringement Analysis

4.1.1 Prior-Art Search

Everything that became already documented and may have lead to the development of a so-called "invention"

The innovation is legitimate and can only be patentable because it varies from the prior art and is not an apparent derivation of the prior art, i.e. there has been any presence in human intellect in the creation of the innovation.

Efforts to identify relevant Prior-Art references in a particular context are called Prior-Art Search. It may include:

-Check the patent / non-patent database

-General quest on the Internet for news stories, posts, forums and other resources

-Identification and consultation of specialists in the sector

-Virtual examination of the 'still-to-be-digitized' collection

4.1.2 Landscape Analysis

1. 1. Patent landscaping is just the category of infringement search that also involves a detailed analysis and search of the patent-related files. Such documents relate to the patent technology field.
2. 2. The comprehensive description of the equipment is structured in the context of the member of the organization. Such classifications are created on the basis of the purpose of the analysis. In this form of search, all records related to the patent are reviewed and categorized in order

to allow clients to extract the full amount of interest from the available collection of patent details.

4.1.3 Infringement Analysis

It is therefore a skilful study to determine that an object or a process infringes a patent. Infringement work allows patents to determine whether an object or practice infringes intellectual property rights.

On this aspect, the copyright analysis helps businesses associated with a product / way to evaluate that a service or device infringes intellectual property rights. The discovery of violation is a crucial step in the creation or modification of product or products.

CHAPTER 5
INFRINGEMENT ANALYSIS

5.1 What is Infringement Search

It is a directive of a forbidden action in the world of patented invention. The patent infringement is use of the invention by other party without the permission from the patent holder. The other party can get the permission from patent holder in the form of licence. The meaning of patent infringement is different in different jurisdiction. But the main idea of patent infringement is performing the procedure of selling, using, offering to sell or making of a previously patented work on the invention. Many of the nation require this use of the patented invention to be commercial or to be have a commercial motive to consider this act to be an infringement of a patent.

5.2 Objective of Infringement Analysis

Infringement search can be used in different types of analysis e.g.

- Claim Amendment during the prosecution phase
- Identification of illegal use of the patented invention
- Licensing Opportunities (Licensing-IN & Licensing-Out)
- Patent Monetization Patent Pruning

5.3 Investigative approach towards Patent Infringement Searches

Infringement searches don't often offer the go answer. Some may seem as nice as they may.

The below is the technique for patent violation searches:

1. The very first step in the quest for a patent violation is the broadest argument of the patent. After choosing the broadest argument, we need to pick the most restrictive item of the argument selected. We need to start looking for the most restrictive priority claim item. In the case of inability to identify the most restrictive aspect of the argument, the novel portion of the patent application can be chosen.

The choosing of a innovative part of the patent claim, or the most stringent part of the patent claim, has a reason. Through choosing the elements of the statements alluded to above, we will save a lot of time in the quest for patent infringements. It is because the more spending time on the incredible

problem of the claim is a waste of effort, since these obvious elements will still be figured, we have to spend longer on the most restrictive part of the assertion or on the newness of the patent claim. When you validate the uniqueness of the restricting factor in the formula, some of the claims elements require fewer time to test. The notice to be made here is that there are situations in which the limiting factors are not present in the drug. For such instances, we ought to push on to the next thing and miss the original. Notice that this is not true in all situations.

There are certainly some long patents. The issue now is how to cope with these kind of long patents? For your knowledge, several of the Chinese patents are now so long due to poor explanations that start making it inconceivable.

The strategy to deal with such long patents is as follows:

We have to split the claims under the tinier clauses. Such provisions may be further separated into the components of the argument. We have to analyse the work - flow of both the patent application. It will be achieved by evaluating all the options for the application of the patent in realistic contexts.

In order to achieve a clearer interpretation of the patent, we will then endorse the elements of our argument with the authorisation of arguments obtained from the definition of section of the patent.

The authorisation of a claim may also be extracted from the patent case background. This phase really does improve.

The following advice comes from my brief background in this business. And sometimes it's not possible to find the patent specification for a claim. We will run a quick google search in these situations. We have to be extra diligent when looking only at portion, the search must be completed in the setting of the patent discovery. If you've had a hands-on background with the business, you should even look at previous patents in the very same area of innovation and discern with them how those arguments were complied with some of these patents.

Definitely, we’re not accomplished here, we ought to take the much more unrecognized step of re - reading the claims.

We have to go for another step as we accomplish so the whole step. It next move allows to find the nature of the components of the argument.

We also entered a phase where even the definition or relation to the words may be unclear. Consider, for example, the word "computer hardware" may be included in the patent. But since term is so broad, so one cannot understand exactly what the innovator of the patent wanted to restrict to that word. We then need to specify the nature of the elements of these statements.

We will go over the definition of the patent to describe the distance. When we are still not sure about the reach, we will go over the background of the patent file cover. At this point, you'd be thinking whether it's not enough to limit patent quest only, is there a specific need to test the background of the file wrapper? And the response is yes, in cases of certain confusion in identifying the distance we really have to link to the file wrapper as well.

Let's aid you with this illustration to better explain the concept:

I was operating on SEP a month ago. Largely, I seem to get a brief overview of the patent anyway by progressing through the patent claims. And this was a different scenario. The terminology of the accusation was not explicit. Many of the sentences of the argument did not make much sense, and some were too difficult to comprehend. But I ended up going through the specification of the patent. The details given in the summary of the patent was often obscure.

This demonstrates that by merely going through most of the patent claims and the definition is never enough, one needs to search the file wrapper of the patent in order to describe the nature of the claim item.

When the distribution of the patent clams has been established, the next move is:

3. Remember all potential fields of use of the product and then pick the products with the highest share of the market.

It's a positive thing if you just don't move on searching for component right after this. This is also a smart thing to learn of viable design implementations. The whole routine will undoubtedly help the customers to start making the most use of his innovation.

Consider an example and presume the patent demands for the system used for imaging. When you hear this term imaging system, you're going to google camera devices. In addition, though, there may be a great deal of opportunities to find this assertion factor in goods. Items such as robots, laptops, cars, diagnostic instruments and several others may come under the category of imaging equipment. It would come as a shock to you that the hunt will be so minute that we find subdivisions of cameras that may involve alarms, surveillance cameras, DSLR, etc. It is presumed that, if the patent overlaps with any of the above described items, it may overlap with the remainder of the items in dispute. Throughout the event that we've not regarded all the areas of application of the patent, we shall constrain the revenue potential of the customer generated by the innovation.

4. Classification of its most available literature (product literature)

It's been a joy to me and I've been creating Google searches to check for items when I finish learning the innovation. Yet we need a far more logical quest for infringing goods. Even any of the key words in the documentation will not be enough.

In regardless of all this, we could also carry out a questioning by asking ourselves a few other queries, like:

What might be the product violating the innovation?

Unless the manufacturer is to utilize the technology, so what might be the potential benefits that it might have?

How and when will the related details be discovered? Would there be any circumstance when the company will disclose it to its consumers?

Maybe there's some possibility that checking the commodity will make things easier to detect overlaps?

Would it be necessary that the actual information might be observed in YouTube or even in new tech review sites?

Thinking about this helps me realize the condition I had one day to confront. This reminds myself of a situation several time ago, when I was talking to my immediate supervisor about mapping a drug. In this case, it must be proven this daily sound and texts messages are contained in the very same document (which would be a correspondence thread). In addition, it was our duty to show that the form of communication (sound or text) is identified to the specified program.

I recall, in that situation, why I didn't leap to the product literature instantly, given the fact why I recognized the most relevant lead. This contributed to the discovery of the field of operation of the innovation. It undoubtedly benefited off at a later point by sharing the sequence with the innovation.

5. Use of search functions such as proximity operators

Over the next iteration of the search, we've got doing some googling. To find the component, we need to select a find string linked to the invention. DocFetter might be the devices that enable in scanning. This method helps in identifying the element. This method is capable of scanning and looking at any of the predefined records and using the proximity operators.

I could indeed remember from my perspective the occurrence of the research performed by John Co-worker on a job. John has become a recent entrant. And he had some contact with the business. He worked on a 3GPP proposal.

Ron decided to collect knowledge on the 5 G definition. He decided to consider that 5 G utilizes an Internet Protocol (IP) infrastructure. Consequently, John is clearly type 5 G Close (Internet Protocol). That's the way to determine in Google Patents, by the way.

Sadly, John did end up disheartened that he's unable to obtain the relevant result of the search. He tried to tell his mentor about this, and his mentor instructed him to experiment with different search string combinations, for example , despite using NEAR, he could have used AROUND.

His mentor’s suggestion helped his day as he was able to locate the appropriate details for this string update.

Much like the minute updates I consider helpful when browsing on google. I'm using some of the google search operators which are as follows:

Related operator: this user may be used to find websites specific to the area.

The whole search might help to identify alternative companies in a relevant area.

We might use the * .. * operator as well. Which is said to use a variety of digits.

For instance, if you'd like to discover a few smartphone video clips between 2015 and 2019, and no other year video clips, and we'll use the preceding search string with the * .. * Operator:

Video Smartphones 2015 .. 2019

It can help you find information throughout a limited time period.

"The term" filetype"-restricts the effects of a particular file type. Whilst also search terms such as "ext:" are sometimes used in this context.

Such as: filetype of microsoft: ppt

This may help us locate knowledge from a credible source. A important assumption is whether at least forty-two keywords are being identified on every one of the websites.

6. Generate the mapping which is tentative

And If I have established that almost all the elements of the assertion are present in the sample, I shall make an attempt to map just to validate the similarity. Once we make a mental contrast, we may skip a claim item or a series of events preceded by an argument. This is when getting ready a mapping that portrays a side-by - side contrast of the claim element with the item, which is shown in the picture.

Until it has been known that if any part of the argument excludes the drug, we have to plan a temporary mapping. This type of mapping is needed to test the infringement. When there is a mental comparison, it is likely that we will lose the aspect of the argument. But now is the moment that we will actually are seeing the value of an effort at mapping.

That alone allows you conclude that each claim element overlaps, and may also assist their mentor to evaluate overlaps, making it much easier to start preparing the Evidence of Use (EOU) charts so if needed.

It helps us to insure that every item of the argument in claim is overlapping. This will also encourage the professor to verify the violation, which tends to have been better to prepare the Proof of Use (EoU) charts when time is needed.

The preceding may be an instance for mapping performed tentatively:

Claim	Product literature	Comments
a storage system for storing information accessible by the blade server system via the middle plane;	The ******* Storage Blade delivers direct attached storage for c-Class servers, with support for up to twelve hot plug small form factor (SFF) SAS hard disk drives or SAS/SATA SSDs or SATA Midline hard disk drives . The enclosure backplane provides a PCI Express connection to the adjacent c-Class server blade and enables high performance storage access without any additional cables. The ******* Storage Blade features an onboard Smart Array ****** controller with 1 GB flash-backed write cache, for increased performance and data protection. Source: nameoftheinfringer.com	******* - Name of actual product hidden to not reveal confidential information.

Table 5.2.1 Tentative Mapping

In addition to specifying the simple similarities by applying colors to the language, we can integrate notes to allow the reader's representation simpler.

The foregoing is then derived from the aforementioned tactic:

All have a particular strategy to respond to dealing with a problem. It's likely that what happened to work for me would not apply for others. As I previously mentioned, certain queries can seem as nice as they would be, whilst others make you need them to get done early. You likely won't revolutionize

the way it is, and now we're, out of our own strategy, striving to make things more effective series of steps.

Growing one of us is special and seems to have a particular approach to solve the issue. It is indeed likely that this is what happened to work for someone doesn't work for everybody else. There can however be among the searches that look very nice, while the reaming searches make the searcher puzzled. This can be remembered that this has not been reversed, however we may have a respected approach, striving to make it more appealing.

CHAPTER 6
PROJECTS WORKED ON

Since it is the company policy to not reveal clients and much of the project details, so I would try to describe the projects I have worked on considering the company policy.

Here are the list of projects I have worked on:

1. 5G Study
2. 5G Infringement Study
3. eVTOL Aircraft Patent Study
4. Online Ads Study of company XYZ
5. Article writing for company's website

6.1 5G study

6.1.1 Objective of the project:

This project is from a client who require a 5G Standard Essential Patent (SEP) count of each company who declared that their patents are 5G standard essential.

6.1.2 What is Standard Essential Patent (SEP)

SEPs, i.e. standard-essential patents, include patents that state here that patent complies with the existing technical standards. Delineated standards bodies involved in producing technological requirements allow applicants to report and issue patent licenses. The left unsolved patent claims meet with the requirements for the firm which every enterprise makes.

6.1.3 What is 3GPP

- The Third Generation Partnership Project (3GPP) consists of seven common partnership agencies concerned with telecommunications infrastructure. The 3GPP representatives listed are:
- ARIB
- ATIS
- CCSA

- ETSI
- TSDSI
- TTA
- TTC

Such seven agencies are referred to as the Corporate Partners. They provide associates with a stable environment for the production of technical specifications and technical reports that express the 3GPP technology.

Conclusion

I applied this strategy on 5G patents. In this projects there are a huge number of patents to be analysed. So we had to be more strategic in analysing these patents such that in shorter span of period we analyse number of patents.

In my initial period of training I had to prepare a tentative mapping for each patents and there used to be a discussion between me and my mentor about the understanding of the patent and tentative mapping of the patent. The major motto of the analysing part of the patent was to tell whether the given patent is standard essential for 5G or not.

6.25G Infringement Study

6.2.1 Objective of the Project

This project is from a client who has provided us with a list of certain companies whom it wanted to target. The client wanted us to show overlap of products of the listed companies with their patents.

6.2.2 Project Responsibility

The client's patent portfolio is huge, maybe patents more than 40,000 patents. There are different technology's patent in their portfolio. I was responsible for patent relating to 5G technology.

6.2.3 Strategy Involved

As I mentioned that there are a huge number of 5G patents in client's portfolio. I had to pick 8 patents out of thousands of patents. I needed some strategy to do it in shorter span of period. So following is the strategy I used:

- The patents with priority date before of last amended 5G specification were shortlisted. We used internal software for that.

- We picked certain most talked about domain of 5G and shortlisted the remaining patents against keywords related to these 5G domain.
- Then we checked whether these patents were standard essential or not. With standard essential patent criteria we left with a small amount of patents.
- Then we picked the patents with broadest claims.
- In this way we picked 8 patents out of thousands of patents.
- Choose products of targeted companies based on the revenue of the products.
- Overlap these products with the patents.

6.2.4 Work done in the Project

Following is the list of work done on the project:

a) Mapping of patents with 5G standards.

b) Preparing Tech Charts.

c) Preparing Detailed Infringement Analysis (DIA) report.

6.2.4.1 Mapping of patents with 5G standards

To overlap the targeted companies' products with client's patents, we need to show that these patents are SEPs. How we show a patent is SEP is described in above part of this report. By declaring a patent to be an SEP, we can very easily show that the given product which uses 5G overlaps with the patents. So showing that the patent is SEP is a crucial step for this project.

6.2.4.2 Preparing Tech Charts

In this step we prepare tech charts for the patents and products. Preparing a tech chart is also a crucial step for the project.

What is a tech chart?

It is kind of document which shows a basic level of mapping of patents with the standards. In this case tech charts contain a basic level of mapping of patents with 5G standards.

Contents of tech chart:

- Overview of the patent
- What is disclosed in 5G standards
- Text from 5G standards

Basically preparing a tech chart is an intermediate step to show overlap with products. By preparing tech chart we ensure that the given patent overlaps with the standards.

6.2.4.3 Preparing DIA (Detailed Infringement Analysis)

In this this way we show infringement of a product with the patent. DIA report gives us an intermediate report. Using DIA report we prepare Evidence of Use and Claim Chart which is not my responsibility in this project. The Evidence of Use and Claim Chart is an evidence one carry to legal offices to show infringement of a product.

6.3 eVTOL Aircraft Patent Study

6.3.1. Objective of the Project

This is a project for an aircraft company who wants to check whether certain companies infringe its patent. The patent claimed a method develop a eVTOL (Electronic Vertical Take-Off and Landing) aircraft. The client was interested in some of the major eVTOL aircraft manufactures. We wanted to pitch him a deal to interest him in our infringement analysis. For pitching a deal we wanted to prepare a prelim for him. This prelim consists of basic patent understanding and finding the major infringed products from top aircraft manufacturers.

6.3.2 Project Responsibility

I was assigned to prepare a prelim report for the client. This prelim report carries a very important role in turning the client into a long-term customer of ours. If the client finds this report good and finds specified infringement plan interesting then he may a lot us the project for long term.

6.3.3 Strategy Involved

Following is the strategy incorporated with the project:

- Understanding the patent

- Selecting major aircraft manufacturers
- Selecting major products of picked manufacturers
- General product literature study of each product
- Basic level mapping for each product with subject patent

6.3.4 Work done in the project

6.3.4.1 Understanding the patent

The basic understanding of the patent is done through patent claims and patent description. The broadest claim is picked which can infringe maximum number of products. After that the file wrapper analysis is performed for the patent. The most limiting claim element and novel part of the patent is deduced from file wrapper analysis. The deduced claim part help us to further carry on the infringement analysis.

6.3.4.2 Selecting major aircraft manufacturers

After understanding of the patent the top aircraft manufacturer are picked which manufacture eVTOL aircrafts. The market study is performed for the selection of top manufacturers based on their revenue. The company with more revenue is given priority over manufacturers having smaller revenue. By picking big fishes the client gets more royalty fees from them.

6.3.4.3 Selecting major products of picked manufacturers

After picking big target companies, we pick their major products. The selection of such products is based on the market success they have achieved. The objective here is to select such product which has infringed the patent and is very successful in the market. By this strategy the client gets maximum benefit out of his patent's infringement.

6.3.4.4 General product literature study of each product

After picking top products we perform a general study on each product. We try to gather product literature and analyse them. The goal here is that how this particular product can be mapped with the

subject patent. We try to go through the product literature as much we can. This general study helps us in next step of product infringement analysis.

6.3.4.5 Basic level mapping for each product with subject patent

After the basic product literature study we check each product on a basic level, whether they infringe the patent or not. The file wrapper study we performed in earlier step plays a major role in this process. We generally try to overlap novel and most limiting claim element with product literature. This shortens our time for product mapping.

6.4 Online Ads Study of company XYZ

6.4.1 Objective of the project

The client wanted us to infringe online advertisement platforms which overlap with its patent. Initially the client listed some of the potential infringers. We were expected to find more such infringing products.

6.4.2 Project Responsibility

I was supposed to prepare Evidence of Use and Claim Chart for the possible infringing products. The Evidence of Use and Claim Charts are evidences which the can be shown as a proof in judicial premises to show the infringement by the product.

6.4.3 Strategy involved

Following is the strategy used in this product:

- Patent understanding
- Prepare tech charts
- Prepare DIA (Detailed Infringement Analysis)
- Prepare Evidence of Use and the Claim Charts

6.4.4 Work done in the project

The project involved a very rigorous amount of work done. Following is the work done in the project:

Patent Understanding

First of all we need to understand the patent thoroughly. The patent is understood by going through its claims and performing claim enablement with the patent description. After that, hthe file wrapper analysis is performed. It consists of finding novel part of the patent and limiting element of the patent.

Prepare Tech Charts

In this step we prepare tech charts for the patents and products. Preparing a tech chart is also a crucial step for the project.

What is a tech chart?

It is kind of document which shows a basic level of mapping of patents with the product. In this case tech charts contain a basic level of mapping of patents with online advertisement platform of company XYZ.

Contents of tech chart:

- Overview of the patent
- Basic level of mapping

Basically preparing a tech chart is an intermediate step to show overlap with products. By preparing tech chart we ensure that the given patent overlaps with the product.

Preparing Evidence of Use and Claim Charts

This part of the project is very much crucial since this is the outcome of the patent. This is the evidence which client shall carry with him to judicial premises for claiming patent infringement by other company.

Before proceeding with the process let us understand what evidence of use and claim charts are.

For preparing evidence of use and claim charts we need to understand the product. In this project the product is an online advertisement platform (such as LinkedIn Ads). First of all we needed to understand the working of these online advertisement platforms. This may include going through

product literature. After the understanding of the working if the online ad platform, we try to show product overlap. For this we use DIA reports and generate a very minute mapping of the subject patents with the targeted product. In this process of preparing claim charts and evidence of use we performed some real life experiments too. Actually we wanted to understand the behaviour of such online advertisement platform. We analysed the ads generated by this platform under specific conditions. These specific conditions determined by the patents.

6.5 Article writing for company's website

Apart from the projects I have also shared my experiences while undergoing through this training. My shared experiences shall be transformed in an article and to be shared on company's website.

Here are some of the articles I have shared with the company:

Article 1:

Are you been in a scenario where a number of people blocked the entrance of a store, making it impossible for real buyers to join, and thereby disturbing the business?

Taking the analogy of this event, imagine what if a hacker attacks your mobile phone and never lets you use the network. FYI this type of attack is called **Denial of Service (DoS) attack**. There are many ways in which the hampered.

Generally when you switch on your mobile phone it is not connected to a network initially. To register itself on the network, it sends a connection request to a network. If due to some reasons its request is not accepted by the network then a lil buddy comes to rescue. This lil buddy is named **T3302 parameter**. It stores a time value. It tells the mobile device to wait for a specific amount of time; in spite of keep sending the connection request to the network which are gonna result into denied register permission, resultantly wasting the phone battery for no use. Its value lies between 2 seconds to 3 hours 6 minutes. Usually we get reconnected to the network in no time, means T3302 parameter is set to a small value. But what if you have to wait for an hour to reconnect to the network. There can be cases when hacker changes this value to a large time value or deactivates it. This means you won't be able reconnect to the network which means no online Netflix streaming and no chill! Sad? Don't worry, I have come across a patent filed by Samsung that claims whenever such situation arrives, in spite of using T3302 parameter's time value, mobile phone uses a predetermined stored value which is generally a small time value. That means you are rescued from a hacker attack. Fortunately this

patent has proved to be an **SEP** (Standard Essential Patent). Phheww, so one thing down from worry list! Cheers to 5G!

Article 2:

Have you heard a term called **subnetting**? *Clue: a term from networking.* If you had bunked the networking classes back in the college then lemme help you out. The principle of subnetting has been implemented to fix IP deficiencies.

Handling a huge amount of hosts is basically a difficult task. Let us take an example. Consider a company having plurality of networks, subnet scheme or a multi-network address scheme will be utilised in here to deal with this issue.

So now you have understood the concept of multiple-address scheme. So now in case of multiple-address scheme if I ask you that how do you manage to get the address of next hop for messages, what would be your answer? Maybe you would come up with an answer but the first valid answer for this problem was answered in a patent back in year 2003. So that answer consisted of following procedure:

1. The IMS receives an SIP message consisting of destination address.
2. The related received address arrangement for the received message is defined.
3. If the previously specified address policy comprises a strategy relating to arriving address system, a pre-specified address strategy is designed to the incoming message.
4. Otherwise, location queries are dispatched to location services and incoming address scheme is converted to departing address strategies, and departing messages are dispatched by means of the departing address strategy given by position facilities.

Article 3:

I remember a day when I was talking over my keypad phone (Nokia 1100). My call ended because of the connection issue. When I checked my phone I observed that in spite of my operator (Aircel), another operator Airtel was mentioned on home screen. I wandered what just happened?

So today when I was analysing a patent, I had nostalgia. The patent claimed a method for charging a single bill for using multiple operators. The patent claimed that a connection setup request is sent by second communication network (Airtel) to the first communication network (Aircel). If the

subscriber of second network is identified as a joint billing subscriber then the second network transmits its own tariff to the first network. The first network combines its own tariff with received tariff. And the billing is done on the basis of this combined tariff.

This was the same case what I told you earlier. Back then I only paid Aircel (my operator), though I used Airtel's connection too. I was so curious about this patent to be an SEP for 5G. And yeah, it is an SEP for 5G!!!

Article 4:

So today I learnt that **5G provides a security mechanism for accessing Packet Data Networks.** Specifically the **IP Multimedia System (IMS)** is provided the security against the possible attacks like fraudulent user attack in which the attacker behaves like an authorized user but is not.

IMS is essentially a classic design structure for providing multimedia communications services like video, voice and text messaging via IP networks. The IMS comprises of the Call Session Control (CSCF) facility. CSCF is mean to be the core of the IMS design which is used to control sessions between end nodes and implementations. Such nodes are known to as terminals in the IMS specifications. The IMS has three major components: P-CSCF, I-CSCF and S-CSCF. So here is the procedure of securing IMS:

1. P-CSCF receives an SIP message from a terminal device connected to a packet data network
2. P-CSCF derives IP address of the source from SIP message
3. P-CSCF derives IP address of the packet which contains the sent SIP message
4. S-CSCF compares both the addresses
5. S-CSCF initiates protection processing based on a result of performed comparison
6. At last the secure access is provided to packet data network based on the protection processing.

Article 5:

Billions to be invested on patent renewals in 2021 and even beyond.

PatentSight also announced that about $8B is expected to be invested internationally on patent renewals in 2020. A certain total leaps to a staggering $184B owing to all the patents presently signed over the entire life of such investments.

PatentSight has drawn up a chart which illustrates which IP organizations are likely to collect the most payments over the lifespan of existing grants. The Chinese patent system leads the chart with such a minimum of $72B, led either by u.s patent office with quite a minimum in $35B in royalties on over lifespan of its existing grants.

The report shows the degree with which the proliferation in patenting in China has arisen in current history. As per the results, if all payments for actually operating Chinese patents are charged through their lifespan, CNIPA would carry upwards of about double USPTO.

The main 2 patent offices which are: USPTO and CNIPA-are liable for 50% of the transactions. The 10 leading patent offices compensate to 90% among all payments. Such dominance only at peak of its industry also was mirrored also in businesses experiencing the highest possible maintenance expenses.

How could businesses avoid millions of dollars in fees?

FYI 1.7 million US grants are all above median, whilst also 1.3 million is less than average. This same large portion of USPTO fees are based from above-average patents. Even so, below and-average patents often lead to a significant, possibly needless cost. Such under-average patents would value $900 M during 2021 and $15B in the lifespan.

And since only a tiny amount of the others had to be trimmed, that will also result in considerable reductions. Thus, however with the diminutive size of a portfolio of the company, this same majority of companies might just save millions in fees, only with chainsaw having fallen on the cheapest possible company's assets.

CHAPTER 7
CONCLUSION

7.1 Conclusion

Upon studying industrial training at GreyB Services, I have obtained a lot of useful skills that can be experienced, and I can fully comprehend how such a firm plays a vital role in the context of intellectual property, particularly in the patent industry. The exposure that GreyB workers have given me ranging from technical side of this industry is very beneficial to me. Whilst also acquiring this blend of professional knowledge, we could really begin preparing ourselves to actually take measures in this technical sector. I get this perception from such a Industrial Training that there will no matter how much experience have been any bizarre thoughts of inexperience in the workplace when the student later enters the industry for a full time.

This industrial training at GreyB Research Pvt Ltd. Has provided a huge up-lift to my career. It has given me deep dive in the corporate world. It has definitely provided me a platform for utilizing my technical and analytical skills to achieve the success. It has given me the chances to work on numerous live projects which is an invaluable experience for me. I have definitely learnt a lot in this period of training.

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