

Landscape Analysis of Intellectual Property

Project report submitted in partial fulfilment of the requirements for the award of the degree of

BACHELOR OF TECHNOLOGY

IN

BIOTECHNOLOGY

By

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Under the supervision of

Dr. Jata Shankar

To



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JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY

WAKNAGHAT, SOLAN – 173234,

HIMACHAL PRADESH

MAY 2022

CERTIFICATE

This is to certify that the work titled “**Landscape Analysis of Intellectual Property**”, submitted by **Soumya Jain (181815)** in partial fulfilment for the award of degree of B. Tech in Biotechnology at Jaypee University of Information Technology; Solan has been carried out under my supervision. This work has not been submitted partially or wholly to any other University or Institute for the award of this or any other degree or diploma.

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CANDIDATE'S DECLARATION

I hereby declare that the work presented in this report entitled “**Landscape Analysis of Intellectual Property**” in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Biotechnology submitted in the Department of Biotechnology and Bioinformatics, Jaypee University of Information Technology Wanknaghat is an authentic record of my own work carried out over a period from February 2022 to May 2022 under the supervision of **Mr. Rajesh Agarwal** at GreyB research Pvt. Ltd.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Soumya Jain (181815)

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

A handwritten signature in black ink, appearing to read 'Rajesh', with a long horizontal stroke extending to the right.

Mr. Rajesh Agarwal

Manager

Greyb Research Pvt. Ltd.

Date: 28-05-2022

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I owe a huge gratitude to all the people who helped, supported and motivated me throughout the internship tenure.

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Submitted by:

Soumya Jain

181815

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Abstract

It is accepted that 80% of distributed science and innovation data contained in licenses is not distributed anywhere else. There are actually a huge number of distributed licenses and patent application references accessible for audit by people in general. This staggering fortune trove of data must be made valuable by recognizing the basic, pertinent references in a given innovation and afterward examining those references in a way that gives data to noteworthy dynamic.

Patent scene investigation, frequently alluded to as "patent mapping" is a demonstrated multistep process, utilizing PC programming and human insight, to parse through, compose and extricate an incentive from this tremendous measure of data. More or less, patent scene investigation gives understanding into the developments that underlie innovation and items. A finished patent scene investigation venture comprises of a lot of specialized references and going with examination from which significant lawful, business, and innovation data can be separated. This data empowers enormous enterprises, new companies, colleges, explore foundations, and financial specialists to comprehend and settle on educated choices preceding putting time and cash into new innovation and item advancement openings.

Patent scene investigation gives an astounding stage to energize thought pioneers from various branches of an association to impart with respect to key business issues. Patent scene investigation improves between departmental correspondences and animates an allencompassing and brought together inward business process that pervades all through the association.

CHAPTER 1

Introduction

1.1 About GreyB Services

GreyB is a professional service based out of Singapore and India. **GreyB has been helping companies to make profits from their intelligent property and innovations working in an off the site or on the site model.** Greyb's client portfolio comprises of organizations, law firms, item advancement organizations, R&D divisions, IP office, patent gatherings, patent lawyers, IP driven investors, budgetary financial specialists, IP financier firms and scholarly foundations.

The affiliation incorporates improvement of the official's professionals with experience and wellness in performing study required for sensible creation, the board and commercialization of approved turn of events and extended length practices in new advances. Our answer suite sorts out get some information about on patent information, clever diaries and market information to help crucial trade choices. GreyB makes strategy suites to assist customers with data expected to heighten the worth got from approved progression

1.2 Goal

The objective is to draw in customers with custom study and assessment on licenses and business material to make advancement theories. Our agent are sifted through upon industry lines, with focal points of fitness in semiconductor, media transmission, electricity based and automatic equipment, metals and material science, programming, high-advancement, customer things, white product, medicine making companies, clinical contraptions/medicinal administrations, biotechnology, solid state material science, compound and science, oil and gas and present day assembling.

1.3 Team Work

Our team designs the client responsibility and work-conveyance model to streamline in correspondence interface, satisfactorily uncover the key business drivers or inquiries behind an errand, tailor fit the game plan suite to offer responses. This mix of client closeness, examining of research methodology on adventure premise connects with us with preferred assistance over the clients.

1.4 Work at GreyB

We work with lawful and in-house patent specialists, patent attorneys (USPTO and EPO rehearses), corporate IP/patent groups, item advancement administrators, innovation licensing groups, R&D stakeholders, IP dealers and prosecution specialists.

CHAPTER 2

Literature Survey

2.1 Intellectual Property-Definition

Intellectual Property (IP) includes artistic things created by the mind itself e.g. an invention or includes designs and images, photos and other things created by imagination in mind and required in business.

2.2 Types of Intellectual Property

Following are the 7 types of Intellectual Properties:-

1. Patent: The protection of a non-obvious and important invention is done by patent
2. Design: Guards the aesthetics of an article.
3. Copyright: Protects the expression of the idea than the idea itself.
4. Trademarks: All the things e.g. logo, marks etc. which distinguish one product from all others are protected by trademark.
5. Trade Secret: Any information that is important and secretive from the business perspective is protected under trade.

2.2.1 Patent

A privilege allowed that prohibits anybody other than company from creating, advertising and utilizing the development is called Patent. The patent for a creation is the award of a property right to the innovator, gave by the United States Patent and Trademarks Office (USPTO). In this way, a patent is a property right allowed by the administrative or local body.

2.2.1.1 Purpose of Granting Patents

As an end-result of the right, the patent owner must give the lawmaking body and along

These lines general society with a complete depiction of the development and its method of use.

The patent framework as such empowers the movements of the Advancement giving a prize framework that underpins supportive consistent and specific data.

A patentable advancement can be a thing or a method that offers another specific reaction for a problem. It can in like way be fundamentally another technique for finishing things, the creation of something else, or a particular improvement for the working of some articles.

Once conceded the term of a patent is 20 years from the date of filling, subject to the instalment of reestablishment of the fees.

2.2.1.2 Reasons for patenting

There are four fundamental motivators encapsulated in the patent framework: to envision regardless, to disclose the development once made, to contribute the wholes critical to test and to plan about and upgrade previous licenses.

1. The incentives to monetarily productive innovative work (R&D) is given by patent. Numerous enormous organizations have yearly R&D spending plans of several billions and millions of dollars. The money R&D spends would have been essentially less or dispensed with inside and out without patents, constraining the chance of mechanical advances or achievements. Partnerships would be substantially more preservationist about the R&D speculations they made, as outsiders would be allowed to misuse any turns of events.

2. In agreement to the first meaning of the expression "patent," patent encourage and empower exposure of advancements space for the benefit of everyone. If pioneers didn't have the real confirmation of licenses, when in doubt, they might want or will all in all keep their manifestations riddle. Yielding licenses by and large makes the subtleties of new advancement open, for abuse by anybody after the patent finishes, or for additional improvement by different designers. When a patent's period has ended, the open record ensures that the patentee's idea isn't lost to the mankind.

3. In different undertakings (particularly those with high fixed expenses and either low unimportant expenses or low creation feeling of expenses — PC processors, programming, and pharmaceuticals for instance), when a headway exists, the expense of commercialization (testing, tooling up a plant, building up a market, and so forth.) is clearly more than the central beginning expense.

4. Patent rights make a spurring power organizations to make workarounds to ensured developments, along these lines making improved or elective headways that may for no situation be made.

One interesting response of present day patent use is that the youth baseball trailblazer can utilize the specific right position to transform into a licensor. It allows the maker to hoard principal fast from approving the turn of events and may allow snappy progression to happen in light of the fact that he/she may choose to not manage an amassing an improvement for the advancement. As such, the trend-setters time and essentialness can be spent on unadulterated turn of events, allowing others to concentrate on manufacturability.

2.2.1.3 Criteria for Patenting

Novelty – The creation ought not to be known openly at all, anyplace on the planet. Owners of the advancements must be careful in order to remain close-lipped regarding the improvement until a patent request has been viably finished. If the idea has quite recently been examined, monetarily mishandled, advanced or showed, by then the peculiarity of the creation may be sabotaged.

In the event that the creation should be revealed to an outsider before an application has been recorded, a non-divulgence understanding ought to be given.

When a "Date of Filing" was got for the patent application, the development is ready to guarantee a "Patent Pending" status and the candidate will be capable to proceed to uncover the creation as appeared in the patent application to invested individuals.

Non-Obvious – The development must be something that speaks to an improvement over any current item or procedure that is as of now accessible. The improvement must not be clear to someone with particular aptitudes or data in the advancement's particular field.

If a development is new yet obvious to an individual gifted in the craftsmanship, the improvement would not fulfill the imaginative development need.

Industrially Applicable– The development must be valuable and have some type of down to earth application. It ought to be fit for being made or utilized in some type of industry.

2.2.2 What is a trademark?

A trademark is an indisputable sign, structure or explanation which perceives things or organizations of a particular representative from the amount things or organizations of various vendors.

When gained, a trademark can exist for whatever length of time that the candidate recharges it at regular intervals. Since a registered exchange mark is a type of IP, it tends to be authorized or appointed to other people.

2.2.2.1 The benefits of registering a trademark

If the mark is not registered you can claim on your rights under common law of action “passing off”. This protects your mark from being copied or imitated.

It is not compulsory in Singapore to register a trademark. Be that as it may, on the off chance that you register a trade mark connection to your merchandise as well as administrations, you are successfully increasing a legal restraining infrastructure of your imprint. A trademark can enhance your business since it very well may be utilized to ensure your piece of the pie, you can permit it to outsiders, for example, franchisees, or you can sell it inside and out for a predetermined worth.

2.2.3 What is copyright?

- Copyrights ensure works like books, PC programs, drama and artistic creations. For the most part, the creator of a copyright work has the privilege to duplicate, distribute, perform, impart and adjust his work. Postulations selective rights structure the heap of rights that we consider copyrights and empower the proprietor to control the business misuse of his/her work.
- A copyright gives the maker of unique work restrictive rights to it, for the most part temporarily.
- Copyrights don't cover the data and the thought itself, just the structure or way where they are communicated. For Example: Literary Works (including composing), craftsmanship, photography, films, TV, music, web substance or sound accounts.

2.2.3.1 What a copyright protects?

Copyright ensures the statement of the idea (e.g. words and representations). Thoughts alone are not ensured. The next might be ensured under copyright law:-

- Storybook workings
- Theatrical workings
- Tuneful workings
- Artistic workings
- Versions of the workings mentioned above
- Tune recordings , cinematography
- Cable programs
- TV programs

What a copyright does not protect?

The protection under copyright does not include:

- Thoughts or concept
- Discoveries
- Procedure
- Method

- Works or other theme that have not be made in a considerable structure in an account or forming
- Topic material that isn't initially from the creator

2.2.4 Industrial Design Rights

The protected innovation right that guarantees the visual structure of articles that are not just utilitarian is an industrial design right. A cutting edge arrangement involves the development of a shape, arrangement or structure of model or concealing, or blend of model and concealing in 3-dimensional structure containing elegant worth. A cutting edge structure can be a 2-or 3dimensional model used to make a thing, mechanical item or handcraft.

It guarantees the imaginative arrangement of things that are not in a general sense utilitarian. An advanced structure involves the creation of a shape, design or game plan of model or concealing, or mix of model and concealing in three-dimensional structure containing elegant worth. A cutting edge plan can be and a couple of model utilized to make a thing, mechanical item or workmanship.

2.2.5 Trade secrets

A trade mystery is a condition, practice, process, structure, instrument, model or collection of information which isn't regularly known or reasonably ascertainable, by which a business can get a budgetary piece of breathing space over contenders or customers.

In examination with licenses, a trade mystery is better as, they are not limited in time (it "proceeds inconclusively as long as the mystery is nor revealed in people in general")

A trade mystery is an equation, practice, process, structure, instrument, model, or assortment of data which isn't commonly known or sensibly found, by which a business can obtain a cash related extraordinary circumstance over contenders or clients. In the United States, valued equation law is mainly dealt with at the state level under the Uniform Trade Secrets Act, which most states have gotten, and an administration law, the Economic Espionage Act of 1996((18 U.S.C.1831–1839), which makes the theft or misappropriation of a serious advancement a lawful offense. This law contains two game plans denouncing two sorts of development. The underlying, 18 U.S.C. § 1831(a),

censures the robbery of upper hands to benefit outside powers. The second, 18 U.S.C. § 1832, denounces their theft for business or financial purposes.

The legitimate disciplines are particular for the two offenses.

2.3 Types of Patents Issued:

1. **Utility patents** may be allowed to anybody who can visualize a valuable procedure, a machine, an article of assembling, or a structure of issue. Model: fiber optics, PC equipment, or prescriptions. Utility patent could be temporary or non-temporary.

2. **Configuration patents** are conceded to a candidate who has created another, unique, and decorative plan of article producer. Models: the appearance of a shoe, a bike protective cap, and so on.

3. **Any** person who envisions or finds and magically reproduces any unquestionable or new collection of plants can be yielded on by Plant patents.

By and large, a utility patent secures the manner in which an article is delivered or works, while a planned patent ensures the manner in which a piece of writing looks. The design and utility both patents might be gotten on for the article on the off chance that it is innovative in the two its utility and its decorative appearance.

2.4 What does a patent look like?

All the more especially the patent data alludes to the accompanying:-

- Applicant : organization applying or the name of individual to have a specific innovation secured;
- Inventor : people or the name of individual who created and built up the innovation;
- Description : a reasonable clarification known existing advancements and issues related with them and how the new innovation is applied to take care of these issues; explicit instances of the new innovation are likewise typically given;
- Claims : an announcement characterizing the extent of the security looked for or allowed through the patent;

- Citation and references : some patent records additionally include references to related technology data revealed by candidate or by a patent inspector during the patent allowing methodology; these references and references incorporate both patent and non-patent archives.

The data spoke to by licenses is an immense wellspring of specialized and lawful data introduced in a normalized design and frequently not replicated anyplace else. It can help clients to:

- Evade duplication of innovative work exertion;
- Conclude the patentability of their innovations;
- Evade encroaching other creators' licenses;
- Estimate the estimation of their or others creators' licenses;
- Take insight on the creative exercises and future bearing of business contenders;
- Take out, break down or survey in explicit specialized fields, specifically those of open intrigue, for example, those identifying with condition issues.

Fig. 1 Front Page of a Patent Application

The image shows a screenshot of a patent application front page for '(WO/2003/071888) SOCCER GOALKEEPER GLOVE'. The page is divided into several sections, with callout boxes providing context for each:

- International Patent Classification (IPC):** A63B 71/14 (2006.01)
- Reference data identifying the applicant, inventor, representative, etc.:** Applicant: LUCAS, Alfred, W., Jr. [USAUS]; 79 Cheese Factory Road Honeoye Falls, NY 14472 (US); Inventor: LUCAS, Alfred, W., Jr. [USAUS]; 79 Cheese Factory Road Honeoye Falls, NY 14472 (US); Agent: STEPHENS, Eugene, S., Eugene Stephens and Associates 56 Windsor Street Rochester, NY 14605 (US).
- Abstract contains the fundamental features of the invention (keywords are found in the abstract, as well as the description and claims):** A palm face of a soccer goalkeeper glove (10) is provided with a strand mesh (20) secured at wrist (35) and fingertip regions (31) to strengthen back bending resistance of the thumb and fingers of the glove. The mesh can extend across spaces between the thumb and fingers on the glove, and can extend over fingertip regions of the glove to be bonded to back sides of the fingertip regions. The strand mesh can have screen or other configurations, and can be formed in a continuous laminate (40) extending over the palm face (of the glove). The goal is to reduce injuries from back bending of a goalkeeper's fingers from impact by soccer balls travelling at high velocities.
- Patent document reference numbers, e.g.,:**
 - publication number: WO/2003/071888
 - application number: PCT/US2003/003327
 - priority number, etc.: 60/358,607 21.02.2002 US; 19/245,919 18.09.2002 US
- Drawings, pictures, graphical representations are found in the abstract, as well as later in the description:** A drawing of a soccer goalkeeper glove (10) is shown, illustrating the strand mesh (20) and other features.
- Countries for which protection has been requested:** Designated States: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW. African Regional Intellectual Property Org. (ARIPO) (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW)

2.5 Patent Laws

The patent law shows the subject for which a patent might be gotten and the conditions for patent limit. The law sets up the United States Patent and Trademark Office to control the law identifying with the giving of licenses and contains different approaches identifying with licenses.

The patent law decides the general field of theme that can be protected and the conditions under which a patent may be obtained.

In the language of the standard, any person who "makes or finds any new and important system, machine, creation, or bit of issue, or any new and accommodating improvement thereof, may get a patent," subject to the conditions and essentials of the law. "Procedure" is portrayed by law as a system, exhibition or strategy, and chiefly fuses mechanical or specific methods. The articulation "machine" used in the standard needs no explanation. The articulation "make" insinuates articles that are made, and joins each created article. The articulation "association of issue" relates to invention plans and may consolidate mixes of fixings similarly as new substance blends. These classes of theme taken together consolidate basically everything that is made by man and the systems for making the things.

As showed by the patent law, the point should be "important." The articulation "supportive" here implies the condition that the subject has a significant explanation and moreover joins the ability to be worked, that is, a machine which won't work to play out the normal explanation would not be called significant, and thusly would not be yielded a patent.

The requirements of what can be protected is set, thusly it has been held that the laws of nature, physical miracles, and one of a kind considerations are not patentable point.

A patent can't be jumped on an irrelevant idea or proposal. The patent is permitted upon the new machine, create, etc., as has been expressed, and not upon the idea or proposition of the new machine. An all-out depiction of the genuine machine or other subject for which a patentee's searched for is required.

CHAPTER 3

ORGANIZATIONS FOR IP

3.1 USPTO

The United States Patent and Trademarks Office (USPTO or Office) is an organization of the United States Department of Commerce. The activity of the USPTO is to yield licenses to ensure the security of manifestations and to enlist trademarks. It serves the energy of planners and associations with respect to their manifestations and corporate things, and organization recognizing bits of proof. It likewise advices and assists the President of the United Commerce, the authorities and workplaces of the Department of Commerce and different offices of the administration in issues including all household and worldwide parts of "protected innovation."

In discharging its patent related commitments, the USPTO breaks down applications and grants licenses on improvements when competitors are equipped for it, moreover it appropriates and scatters patent information, records assignments of licenses, keeps up search archives of U.S. besides, remote licenses, and keeps up a journey space for use in taking a gander at gave licenses and records.

The USPTO moreover spreads patent and trademark information that propels a cognizance of authorized development protection and energizes the unforeseen development and sharing of new advances far and wide. [1]

3.2 EPO

The European Patent Organization (ordinarily condensed EPO in order to remember it from the European Patent Office, one of the two organs of the affiliation) is an open all inclusive affiliation made in 1977 by its contracting states to permit licenses in Europe under the European Patent Convention (EPC) of 1973. The European Patent Organization has its seat in Munich, Germany, and has administrative and financial self-administration.

The European Patent Organization isn't legitimately bound to the European Union and has a couple of people which are not they EU states.

The improvement of the Organization is naturally associated with the European Patent Convention. [2]

3.3 World Intellectual Property Organization

Their focal objective is to propel advancement and creative mind for the money related, social and social improvement everything being equivalent, through a sensible and incredible overall IP system.

The World Intellectual Property Organization (WIPO) is the UN office focused on the usage of ensured development (licenses, copyright, trademarks, plans, etc.) as techniques for reproducing progression and creative mind.

WIPO's part states choose the imperative course and activities of the Organization. They meet in the Assemblies, warning gatherings and working social affairs.

The staff of WIPO is drawn from in excess of 90 nations. They give the aptitudes and experience to convey WIPO's differing administrations and programs, and to guarantee the effective association of the organization. [3]

CHAPTER 4

TYPES OF SEARCHES:

At GreyB we perform 3 basic kinds of searches:-

4.1 Prior Art Search

4.2 Infringement Analysis

4.3 Landscape Analysis

4.1 Prior Art Search

What is Prior Art?

- Combination of two words prior + Art meaning earlier/existing knowledge
- Anything that was publicly known and could have contributed towards the making of a so called “invention”

Invention is valid and may be patentable only if it is different from the prior art and is not an obvious derivation of the prior art, in.e. there was some involvement of human intelligence in making of the invention

4.2 Infringement Analysis

This is an aptitude escalated study led to decide whether an item/process encroaches a patent. Infringement examination enables patent holders to decide whether an item/process damages their patent rights.

Then again, infringement examination helps organizations related with an item/process decide whether their item/process damages privileges of a patent. Infringement investigation is an indispensable advance in item/process configuration/overhaul.

4.3 Landscape Analysis

1. Patent landscaping is a study that involves exhaustive search, analysis and synthesis of patent documents relating to the technology domain of your interest.

2. A point by point scientific categorization of the innovation is set up in a joint effort with the customer, in view of the goal of the investigation. The patent reports are broke down and organized in the scientific categorization to enable our customers to get most extreme incentive from the accessible patent information.
3. Patent landscape reports are generally utilized as an information base for understanding contender methodology, and understanding innovation patterns, among others.

Following are the steps that take place in a landscape project:-

1. Title Page
2. Agenda and Contents
3. Project Challenge and Scope Guardrails
4. Project Plan
5. Existing Business/Portfolio Review
6. Category Outlook
7. Competitive Opportunities
8. Trends
9. Technical Opportunities
10. Consumer Hypotheses
11. Recommended research, objectives, methods

CHAPTER 5

PROJECTS WORKED UPON

Technology analysis for Nicotine reduction in Tobacco plant

Tobacco is being consumed worldwide in different forms from ages. Nicotine is the one component that is unique to tobacco plant and it is the same, which causes addiction in an individual.

Tobacco industry is a billion dollar industry worldwide and in some way, it is on that level because of nicotine's addictive properties. However, government organizations of the world are always trying to reduce nicotine addiction, through many ways.

One such example is coming from USA. FDA is always implying one or other ways, by which this nicotine addiction can be reduced and recently on that path, FDA approved a cigarette manufacturer to market their cigarettes as reduced risk cigarette or 95% less nicotine cigarette. This activity led several other companies to run and find ways to reduce nicotine in their cigarette.

Gaining from that, I worked on a similar project, in which my colleagues and I conducted a landscape study on the similar topic. The study was divided into 5 phases:

1. Domain understanding, building taxonomy and search strings.
2. Relevancy check of patents.
3. Categorization of relevant patents.
4. Trends, insights and presentation.
5. Executive Summary.

Phase 1: Domain understanding, building taxonomy and search strings:

Before starting any project, we take some time to develop our understanding of the technology of the domain from which project belongs to project. We understand the goals set by client and might do a call with client to further discuss the project.

While the understanding phase, we look for some sample patents, NPLs or any related literature, and look for some keyword and patent classes from which we can cover the whole aspect of the project.

Using the appropriate keywords, we make search strings. Search strings are made using Boolean operators like “AND”, “NOT”, “OR”, “ADJ”, “NEAR”.

Search strings are made to find much targeted patent set and broad patent set too. By patent set, I mean we execute these strings in “Derwent Innovation”. (Derwent is a powerful search engines designed for both IP and R&D users) and we get set of patents that are somehow related to the strings.

Next step is taxonomy building. Taxonomy is basically a division of all the possible technologies we will find in a flow chart manner, which we will use later for categorization of literature we find relevant. Here, it was covering different aspects such as nicotine content left after reduction process, stages at which nicotine reduction methods are used and so on.

Phase 2: Relevancy check of Patents:

In this phase, we read and make an understanding of each patent we extracted and then do relevancy check, see if the patent is relevant according to the scope of the project. Many patents are usually junk and they only were extracted because there may be some similar keyword or patent class in those patents and we have to keep them aside as irrelevant patent set.

We can read patents on different publicly available patent search engines like USPTO (for US patents), Global Dossier (For US, Japan, Korea, China and European patents), espacenet (for patents from everywhere), and many more.

Mostly, we use GreyB’s in-house search engine “Slate”. Slate has a lot of useful feature that makes it most used, easy, fast platform to search, read and analyse patents.

Useful features of Slate:

1. We can put in keywords we want to highlight, in the keywords and tomograph section.
2. We can highlight any text in a patent and put a comment for it, as why it was highlighted or why is it important.
3. There is automatic AI generated summary on the top of the patent, which can give us a gist of the whole patent.

4. We can get all the important information about a patent by just clicking “B”. Information like patent legal status, patent classes, patent family details, etc.

Phase 3: Categorization of Relevant patents:

In this phase, we categorize all the relevant patents that we found during our phase 2. Here, we used the taxonomy we build in the starting.

Here, different technology nodes were populated related to genetic modification of tobacco plant, non-GMO methods, physical methods, chemical methods, etc., all to reduce nicotine content in tobacco.

Phase 4: Trends, insights and presentation:

In this phase, we derived the trends from the patent categorization to highlight top techniques for nicotine reduction, important players, and a few general trends such as geography based, patent maintenance based, etc.

Through these trends, we substantiated them via market activity to generate insights and recommendations for the client.

Some of the questions that were answered were:

What are the major competitors that are working in this space?

What innovation is most prominent and on which most of the competitors are working?

Is there a recent shift in the technology trend by companies?

Are there any start-ups working in this domain?

Potential collaborators, merger, or acquisition.

Phase 5: Executive Summary:

In this phase, we summarized the prominent trends and build a summary w.r.t. the key objectives of this study. Along with it, we provided our recommendations and key takeaways from this analysis.

Conclusion

This industrial training at GreyB Research Pvt Ltd. provides a huge boost to my career. It actually provides me exposure to the corporate world.

It provided me platforms to utilize my skills and path to take a leap towards success.

It provides me the opportunities to work on various live projects. I have learned a lot about Landscape Analysis and predicting future technologies.

References

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