

“Competitive Intelligence Strategies Formulated using Intellectual Property Right Data through Patents”

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ABSTRACT

Competitive intelligence permits organisations to make effective and well-informed business decisions. In organisations, a patent is viewed as a strategic asset as they provide a competitive advantage over the competitors. Knowledge or disclosure of Intellectual Property strategies based on patent filings is seldom available in the public domain. Due to the unavailability of first-hand knowledge of competitor strategy, the sole technique to deduce and understand Intellectual Property strategy is to observe the competitor's patent filings, analyse the same and thereby, based on their trends of conducting business and inventing technology, deduce their strategy. This paper tries to decipher different ways of gaining and improving the competitive intelligence of an organisation through analysis of patent filings which shall be useful to comprehend the strategies adopted by organisations to advocate their Patent Portfolio and align their business needs with patenting activities. This paper also analyses different patent filing strategies used by firms to gain a competitive advantage over their competitors.

Keywords: *Competitive Intelligence, Patent, Intellectual Property, Patent Portfolio, Strategy*

INTRODUCTION

Decisions critical to the working of an organisation such as mergers, proposals, alliances, innovation, etc including other business strategies that are based on well-timed and accurately obtained information for the subsistence of the organisation. Systematic collection of data, the study of the operating environment, and well-informed decisions are crucial to the functioning of a business and implementation of their strategies. The process of developing systematic processes to sift through a large amount of data, extract pertinent information, and transmute the information into knowledge is known as Competitive Intelligence. The main objective of Competitive Intelligence in a business organisation is to simply outlive the competitor through informed decision-making techniques.³

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³ LARRY KAHANER, *Competitive Intelligence*, Simon & Schuster (1996)

Competitive Intelligence as a strategic framework is turning into a crucial tool for the survival of the organisation. It reveals the position of an organisation comparative to its competitors; customer behavior, purchasing power, purchasing pattern; strengths and weaknesses of the organisation in its operating environment; market conditions, market trends, demographical changes; social, political and regulatory environment; new inventions and technology introduced by other firms, etc. Organisations with continuous developing technology require protection for their invention. Intellectual Property Rights offers a wide range of protection such as trademarks, patents, copyrights, trade secrets, anti-competitive practices, etc. For business organisations, a patent offers the strongest form of protection. A patent is a form of Intellectual Property Right under which legal protection in the form of exclusive rights is granted to an invention for a limited time, by the Government, in exchange for public disclosure.

A patent is one of the major sources of information for an organisation. When processed and analysed accurately, it can provide crucial information regarding competitor activities, research and development, new inventions and ideas, and collaborations.⁴ Taking into account the filing practices such as filing routes and territorial protection associated with specific companies or domains, the analysis of patent portfolios can give a reasonably accurate idea of the underlying trends, detect emerging or hidden information or deviations from expected patterns, etc.

USING INTELLECTUAL PROPERTY DATA FOR COMPETITIVE INTELLIGENCE

Organisations strive in the segments for which forms of Intellectual Property are usually good indicators, especially patents. A patent application published in the public domain will be the key place to discover actual evidence of a recently invented product, invention, or procedure.⁵

To cite a case study that bids an example of a failed strategy that could have been prevented by investigating patent applications is the case of Xillix, a British company, which manufactured medical devices. Xillix formed a strategic alliance with a Japanese company Olympus Optical and disclosed few trade secrets. Going against Xillix, Olympus filed for various patents in Japan on Xillix's exclusive technology. Xillix discovered the same only when Olympus was issued a patent in the United States. Even though Xillix won the successive legal case, the corporation turned bankrupt. Had they used competitive intelligence through patent analysis, it would have helped them avoid the threat which led to bankruptcy as the Japanese patent applications had already been published years earlier. Analysis of IP holdings discloses informed data about a competitor's strategies. Intellectual

⁴ H. SCHOFIELD, *Patent Information Usage By Chemists In Universities* (1996)

⁵ Vinod Singh, 'Mining Patent data for Competitive intelligence' (March 10, 2020, 10:00 AM), Available at: <https://www.mondaq.com/india/Intellectual-Property/32724/Mining-Patent-Data-for-Competitive-Intelligence> [last accessed on March 12, 2020, 10:00 PM]

Property data is generally available in the public domain from a variety of sources such as patent holdings to indicate patent filing, frequency of filing, citation history, etc.⁶

Intellectual Property has three extensive roles within an organisation –

- As a tool to protect price and market share by excluding others from a specific market place.
- Insurance against legal action by other patent holders, operating to mitigate the risk of infringement.
- As a financial asset in the high-stakes poker game of strategic alliances, in which technology is licensed, swapped, assigned, mortgaged, or held as a blocking strategy.

EXTRACTION OF INFORMATION FROM PATENTS

• IDENTIFICATION OF COMPETITORS

Subject search outcomes can be ranked or charted graphically to analyse a comparison of the gross figure of patents and patented documents owned by competing organisations. This type of study is weighed in the terms of innovations created along with corresponding filings in different countries because the technology or invention characterizes extensive research as compared to the inventions protected in a single country.⁷

• ANALYSING INVESTOR RECORDS FOR ASSESSMENT OF HUMAN CAPITAL EMPLOYED BY COMPETITOR ORGANISATION

A ranking and time-line review of inventors may reveal a broad-based research and development team with low turnover, or a volatile situation in which reputable scientists have fled to other companies. Patent records may reveal jointly held patents with Universities or other research collaborations, indicating strategic use of human resources.⁸

• OBSERVING AND ASSESSING COMPETITOR'S FILINGS AND DIRECTION

Graphically mapping the concentration and rate at which patents are applied or filed for transversely across every invention by competitor organisation discloses the aims and objectives of their research and investment into the same. Patent and trademark search directly the sectors of international markets that the competitor organisation is aiming to target as per their business strategy. Chronological profiles maintained for patent filings

⁶ Simmer. R.V., 'Using Intellectual Property Data for Competitive Intelligence' (2001) Available at: <https://static1.squarespace.com/static/5a63a8a7f9a61ebef7a6a96c/t/5a63cab20852297c419a2245/1516489394905/CH4-CompIntelRevB.pdf> [last accessed on March 12, 2020, 10:00 PM]

⁷ Anthony Trippe, 'Patent Information Users Group, Inc. The International Society for Patent Information Software tools for analyzing patents' (April, 1999) Available at: <http://www.piug.org/pattools.html>. [last accessed on March 12, 2020, 10:00 PM]

⁸ *Supra* note 4.

reveal and deduce a competitor's abandonment or investment in a particular field. Citation searches may also help study a competitors' patent portfolio, which is filing for enhancements of a rival product segment. For example, recently through a patent filed by the US Patent and Trademark Office, competitors found out that tech giant Apple was set to produce mattresses known as iSheet which would contain certain sensors to monitor a person's sleep⁹. This would help companies in a similar industry to formulate their business strategies accordingly.

- **DISCOVERING MARKET STRUCTURE, TREND, AND DEVELOPMENT OF NEW TECHNOLOGIES**

The US Patent Office offers free services through which one can search patent data by the country in which the patent is filed, making it simple to map inventions and technologies by the process of classification of a patent that is filed by specific countries and analyse novel development in the markets, as seen in the case of iSheet reveal by Apple patent filing¹⁰. Patent filings record based on time shall make known fast-tracked patenting in segments that demand new technology.

- **FIND NEW EMPLOYEES, CONSULTANTS, AND EXPERTS**

Basic research shall provide a list of those Universities and educational institutes or research centers that are filing patents in their areas of interest, divulging the requirement for an economically friendly way to absorb short-term scientific talent, obtaining contractual based research, or licensing edge-cutting technology.

- **LOCATE LICENSEES**

Comprehensive research into the market or the area of patented technology of a rival company can reveal recruits and trainees on the ground who have to acquire a patent license to practice.

PATENT PORTFOLIO ANALYSIS

The aim and direction of a rival organisation's present and upcoming technology development can be analysed via conducting a review of the organisation's Intellectual Property portfolio. The terrestrial coverage of the patent-holding is indicative of global market strategies.¹¹ Patent holdings and the frequency of filing patents unveils the product lifecycle and developments in technology. Moreover, the citation search reveals the

⁹ Phoebe Weston, 'Apple to spy on your snoozing: Tech giant is set to make an iSheet woven with sensors and a camera above to monitor sleep', Dailymail UK (30 November, 2018) Available at: <https://www.dailymail.co.uk/sciencetech/article-6446065/Apple-spy-snoozing-Tech-giant-set-make-iSheet-woven-sensors.html> [last accessed on March 12, 2020, 10:00 PM];

¹⁰ 'Apple Patent Reveals a Vital Signs Monitoring System Integrated into a Bedding Mat that's not from Beddit', PatentlyApple (Feb.15, 2018) Available at: <https://www.patentlyapple.com/patently-apple/2018/02/apple-patent-reveals-a-vital-signs-monitoring-system-integrated-into-a-bedding-mat-thats-not-from-beddit.html> [last accessed on March 12, 2020, 10:00 PM]

¹¹ Vol. 4, Manas Bulchandani & Akshay Khanna, 'Patent pooling in the Indian scenario', International Journal of Law (March, 2018) at p. 15-21

significance of holding a patent right in the market. The human capital employed in research and development may stipulate personnel management in the organisation. The quality of patents based on the Proficient study discloses “how well a core technology is protected”¹².

Additionally, market timing is one of the crucial factors to be taken into consideration while filing for patent holdings. While having the first-mover advantage to enter the market is important, the footing must be protected long-term.¹³ To cite an example, Kodak saw Fuji Corp. preparing to introduce in Japan a single-user camera, and predicted that Fuji might target to enter the US market in the future. Kodak, having a well-built secure patent base in the US pushed its product into the US market first and became dominant there for single-use cameras. Fuji having weak patent protection in the US, hence had to compete with twenty-eight other corporations who were replicating Fuji’s key product, the single-use camera.¹⁴

Several strategies may be adopted when a competitor’s patents block a company. These strategies may include buying the patent or the company, licensing or cross-licensing the IP, creating better technology and patenting around, suing for infringement or invalidating the patent by legal action or re-examination, and opposing pending applications.

Concerning competition, often the organisation experiencing turbulence shows a portfolio of failed, invalid, misassigned, expired, and hypothecated patents that provide poor protection to the technology or invention under question. A more lucrative pathway to dodge the disputes and confusion is to cross-license in order to share different segments of the market in a joint monopoly, one of the most common strategies that are utilized by Microsoft and Japan Vector Company, both the companies have mutually decided to have a joint monopoly in computers and televisions respectively. Other circumstances may explain the creation of a patent pool that dominates an industry, for example, Sony, Pioneer, and Philips formed a patent pool to dominate the Video Disc Read-Only market segment.¹⁵

CONCLUSION

The patent law stream and various technologies it covers within its ambit are complex than other fields. The documents give out important information like one’s competitors and the products that are generally unavailable. It makes it necessary to administer these patents because the rival is essentially obligated to reveal publicly sensitive details that it might never otherwise share. Last, real patent technology administration will surely make a valued interface between technical innovation and economic rewards.

¹² Invintree Patent, Using Patent Citations as an Effective Tool While Conducting Prior Art Search (Apr. 14, 2016) Available at: <https://www.invintree.com/blogs/using-patent-citations-as-an-effective-tool-while-conducting-prior-art-search> [last accessed on March 12, 2020, 10:00 PM]

¹³ *Ibid.*

¹⁴ Brachhman, S. ‘The Rise and Fall of the Company that Invented Digital Cameras’, IP Watchdog (Nov. 1, 2014) Available at: <https://www.ipwatchdog.com/2014/11/01/the-rise-and-fall-of-the-company-that-invented-digital-cameras/id=51953/> [last accessed on March 12, 2020, 10:00 PM]

¹⁵ Priyanka Rastogi, ‘Patent Pooling’ (March. 10, 2020, 10:00 AM) Available at: <https://www.mondaq.com/india/Intellectual-Property/325602/Patent-Pool> [last accessed on March 12, 2020, 10:00 PM]

In all matters, an organisation should contain a comprehensive interpretation of the strengths and drawbacks of the patent holdings. Moreover, the organisation should appreciate the usage of IP for optimum benefits. Competitive strategy with respect to IP is required to be supplementary to the business strategy, aims, and objectives, and checked to deliver a minimum standard for the company and to control the rank of the competition. Intellectual Property information is optimized by integration with data from a comprehensive spectrum of other business bases in order to shape an extensive, connected picture of the competitive atmosphere for a company. The use of patents as strategic business tools has opened a new horizon for using patent analytics in acquiring business intelligence-based insights and competitive intelligence. Competitive intelligence-based patent analytics can be used to consider the tactics businesses have used to promote their patent portfolio and align their business with patenting activities.