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A Study on Patent Strategy and Management

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ABSTRACT- This study reorganizes and conceptualizes existing patent strategy research, which has origins in a variety of fields such as economics, law, and management. As a result, it is expected that this analysis will assist to organize and drive what is now a disjointed and fragmented area of management research. The primary framework presented focuses on two key topics in patent strategy research: generic patent strategies and patent strategic management. Furthermore, research in each of these topics is usually mapped onto one or more of three major domains—rights, licensing, or enforcement—within which patent-related strategic activities are normally carried out. The three patent strategy domains are juxtaposed with various theoretical lenses used in patent strategy research in two summary tables of previous research. Finally, the paper discusses two potential areas where research is starting to focus on their links to patent strategy: companies' general appropriability strategies and value creation strategies. An overall conceptual graphic depicts the many study topics discussed in the article and emphasizes the connections between them. By revealing its numerous connections with the wider management field and providing possibilities to address key unsolved research issues, the reconceptualization and reframing of previous research presented in this study promises to improve scholarship on patent strategy. As a result, it serves as a helpful road map for future management study in this critical field.

KEYWORDS- Appropriability, Isolating Mechanisms, Patent Strategy Value Capture.

1. INTRODUCTION

Because information is vulnerable to leakage, spillover, imitation, and mobility, firms have a significant problem in maintaining their competitive advantages as the global economy shifts to a knowledge-based economy. In today's changing business environment, determining who owns significant pieces of intellectual property (IP) is a crucial strategic battleground, and deciphering patent strategy is a pressing and exciting problem for management research. While the majority of early research on patents and patent strategy was located in the legal and economics literatures, management research has now completely embraced this endeavour. This article analyses the present state of research on the strategic use and management of patents from the perspective of management scholarship. While several major economics and legal papers are included in the research, the breadth of these literatures is purposely constrained. Research with a primary focus on economics, law, or public policy is expressly banned unless it has an impact on a company's patent strategy. Governments provide patent rights to protect inventors' creative work and, as a consequence, to keep incentives to produce and commercialize discoveries alive. Patent rights are primarily protected by national laws and institutions, and they have a long history in many Western democracies and are well-established in the legal system[1], [2].

1.1 Patents

Patent privileges, for instance, are made conceivable in the United States by powers given to Congress under Article 1, Section 8 of the Constitution. Public patent frameworks are for the most part independent and have significant varieties; be that as it may, over the course of time, worldwide arrangements and associations have brought about expanding reconciliation and harmonization of public patent frameworks. These turns of events, as a general rule, address an overall change in the expansiveness and strength of patent privileges toward created country standards, which have been supported and stretched out over the long haul. IP privileges, especially licenses, have for quite some time been perceived as a significant sort of impersonation obstruction in administration research. It is fundamental for note, notwithstanding, that a patent doesn't consequently give a market restraining infrastructure; rather, it awards patent proprietors (innovators or their "chosen ones") the option to preclude others from using a development whose cutoff points are characterized by the patent's etymological "claims" temporarily[3].

To be conceded a patent, a development should make a new, significant ("nonobvious"), and valuable development over past craftsmanship (the "earlier workmanship"), and just these extraordinary attributes are patentable. Moreover, the social can anticipate conceding a patent is that it appropriately portrays the guaranteed new invention. Prior to conceding a patent, patent inspectors utilize these standards to confirm that the expansiveness of the development's cases appropriately mirrors the specialized advancement expressed in it. Be that as it may, since inspectors don't have opportunity and willpower to completely investigate each patent application and might not approach all past craftsmanship at the hour of assessment, licenses are intrinsically defective and questionable property privileges. These inquiries may not be responded to for a really long time after the patent is given, for the most part with regards to patent prosecution. Subsequently, it is reasonable to presume that, without even a trace of prosecution, the normal patent right is exceptionally "fluffy" as far as its legitimacy and expansiveness[4]–[6].

Two "matrixed" tables of patent methodology research (one for each significant subject) are given, which consolidated give a 10,000 foot point of view of the field,

by comparing the three patent spaces with the hypothetical focal points utilized in each examination topic referenced previously. Subsequently, this planning causes to notice critical contentions and examination prospects in every one of the branches of knowledge. The parts that follow portray the three patent methodology regions prior to going into the two significant review subjects of nonexclusive patent techniques and patent vital administration. In the wake of going through the essentials of patent methodology, the review continues on to two bigger areas of exploration that are connected to patent technique: "patent procedure and appropriability plan" and "patent system and worth age." The appropriability results that patent strategies produce in the long run sway organization worth and execution. Notwithstanding, patent methodology isn't the main appropriability instrument available to organizations, suggesting that organizations (and scholastics) ought to analyze how patent procedure collaborates with other appropriability techniques and how they ought to be facilitated.

Moreover, the patent (or appropriability) strategies embraced by an organization have little impact on development and worth age around its innovation. To benefit from having a patent consolidated in an innovative norm, an organization might have to permit the patent to different organizations based on satisfactory conditions and along these lines be prepared to change its patent methodology. Subsequently, as well as gathering the advantage of development, organizations might have to make compromises in their patent methodology for their innovation to produce more worth in the commercial center and outcompete other intelligent fixes. Since the expansiveness of appropriability methodology and friends esteem age is far more extensive than licenses, planning them onto the three patent procedure spaces has neither rhyme nor reason. All things being equal, the survey sums up our present information in every one of these spaces and features key irritating issues to direct future review [7].

1.1.1 Domains of Patent Strategy

Patent methodologies are an assortment of asset distribution decisions and fundamental "rationales" for settling on choices with respect to licenses that happen for the most part in three significant (and interconnected) areas of movement: privileges, authorizing, and implementation. Patent privileges are acquired, reestablished, reissued, and kept up with by means of an assortment of exercises, including the auxiliary market procurement of others' licenses. It's memorable's fundamental that not all developments are protected, and that the probability of getting a patent fluctuates relying upon factors including the size of the organization, the modern area, and the sort of innovation (item or interaction)[8]–[10]. At the point when licenses are documented, they might be deserted or proceeded into new applications, and organizations can for the most part pick how much cash, consideration, and expertise they put into each patent. Firms may likewise purchase licenses from different organizations to add to their own portfolios. Firms might have their licenses reconsidered and reissued whenever, and they can decide to have them reestablished or terminate at customary stretches. Firms may likewise utilize complaint and reconsideration methodology to attempt to impact their adversaries' patent possessions [11]. Firms might facilitate the acquisition of a few related licenses to develop patent wall or shrubberies, the previous to frustrate replicating and the last option to use as a negotiating concession in cross-authorizing talks, going past the extent of a solitary patent. Authorizing alludes to activities like standard-setting, partnerships, open advancement (counting open source and client development), patent pooling, and cross-permitting that incorporate the trading of privileges to use protected innovation. Like protecting, organizations' eagerness to permit (or offer) innovation fluctuates, and in any event, when they do, the states of the permit contrast as far as restrictiveness and expansiveness. The utilization of the danger of prosecution to convince infringers to stop using protected developments or pay sovereignties is known as implementation. Genuine patent prosecution is extraordinary in the United States, with just around 1.5 claims documented per 100 licenses conceded, however the recurrence of verifiable or unmistakable dangers of implementation is probably going to be significantly higher. A few measurements of patent worth have been connected to the probability of prosecution and the recurrence of case in past investigations [12].

1.1.2 Ownership Strategy

The "most powerful advantage" of licenses has been portrayed as the ability to "stake out and safeguard a private market advantage." fundamentally, a private methodology is the conventional asset based rationale of using licenses as disconnecting instruments to safeguard an organization's center upper hands against impersonation. The financial matters of licenses perceives the capacity of licenses in giving trend-setters with a restrictive business advantage in potential open doors produced by their advancements. Moreover, the cures accessible in patent prosecution explicitly, directives and lost benefits verifiably recognize that organizations might need to utilize their licenses solely. Making dividers, "hostile" obstructing and appropriation, building "hostile" shrubberies, disallowing replicating, and different demonstrations, "methodologies," and employments of licenses distinguished in past investigations are instances of restrictive patent methodology. Without a doubt, organizations taking on a private methodology might be expected to develop covering and corresponding patent privileges to enhance the insurance given by individual licenses, diminishing the chances that the assortment of licenses would be improved around or discredited. Patent wall are comprised of licenses that cover "an assortment of possibly exceptionally different mechanical techniques for accomplishing a practically identical utilitarian result." To put it another way, organizations might patent conceivable substitution and follow-on advancements themselves (in front of their adversaries) and utilize experienced legitimate direction to ensure that their licenses are lawfully strong [13].

1.1.3 Defensive Approach

While a restrictive patent methodology intends to give an organization a strategic advantage, it might likewise be important to ensure that the organization isn't in a difficult situation or at risk of being held up for lease because of licenses possessed by others.

5 Simply expressed, organizations might have to foster a trustworthy arrangement for battling against licenses that

are held (and potentially implemented) by different gatherings. Firms as often as possible make critical irreversible interests in business possibilities in quick moving high-innovation areas before it is obvious who possesses every one of the licenses for the fundamental advancements. Thusly, on the off chance that the scope of advancements expected to advertise an item is broad, as in multi-development circumstances, openness to others' licenses might be particularly inconvenient. The need for cautious strategies originates from the way that a patent just awards the option to prohibit others, not the option to use the safeguarded innovation. Subsequently, on the off chance that licenses on different advancements required for commercialization are guaranteed against an organization, it very well might be kept from using even its own developments. Accordingly, the proprietors of such licenses might haggle for incredibly high leases by compromising a court-requested directive against the supposed encroachment. Diverting R&D and the association's endeavors overall towards specialized regions where prosecution is less plausible is another protective methodology that has stood out enough to be noticed. For instance, biotechnology organizations with high prosecution costs have been found to try not to patent in patent classes with numerous different licenses and licenses held by low suit cost partnerships, as evaluated by their absence of past case insight and paid in capital [14].

1.1.4 Leveraging Techniques

Generally speaking, an association's restrictive patent methodology, as well as its protective methodology, may not be appropriate; all things considered, licenses might in any case be valuable instruments for procuring additional rents. The principal reasoning of utilizing strategies is that the organization might look for immediate and backhanded benefit prospects on account of the arranging benefits given by patent exclusionary power. Patent authorizing pay are the clearest prompt prospects. A portion of the organization's licenses might cover innovation that aren't fundamental for its methodology or center capabilities, however they're in any case significant. In different occurrences, innovation that are (blemished) substitutions may currently be accessible for permit from different organizations, or it very well might be feasible to improve around the association's licenses (though at some expense and with some probability of disappointment). Generally speaking, a restrictive patent methodology is either unnecessary or unreasonable, however the organization might utilize its patent privileges to increment authorizing pay by utilizing its bargaining posture. Regardless of whether the organization takes an interest in entire patent portfolio cross-authorizing, it very well might have the option to get compensation for its more grounded or more significant developments (comparative with the cross-permitting accomplice). In a patent utilizing methodology, the association's point is to effectively haggle for rents in different circumstances by utilizing its scholarly privileges. Subsequently, the organization doesn't have to patent each elective procedure or have total patent assurance. While they might help on the edge, it is more fundamental to have patent inclusion on a significant innovation that different organizations are utilizing (or will utilize) and that working around the association's licenses has significant expenses and dangers. Through the feeling of dread toward patent prosecution, the organization gains arranging influence with clients of the innovation [15].

1.2 Strategic Patent Management

Presently we'll take a gander at an assortment of hypothetical rationales that have been utilized to all the more likely see how organizations deal with their patent-related choices and exercises. These exploration streams might be considered taking a gander at critical execution gives that arise while carrying out conventional patent techniques, and they might be associated with them in significant (however for the most part neglected) ways[16]–[18]. While conventional patent methodologies have an immediate connection to firm upper hand and worth catch, interest in patent vital administration comes to a limited extent from the hypothetical focal points utilized and the bits of knowledge delivered for the significant hypothetical literary works. In this part, we investigate genuine choices rationale in licenses, flagging and data divulgence, nonmarket patent strategies, and the advancement of patent administration abilities all together. While a portion of these examination streams have an unmistakable and restricted hypothetical accentuation, others (especially nonmarket methodologies) are all the more wide and impacted by an assortment of hypothetical points of view. In any case, the significant point is that scholastics have effectively situated their work on essential patent administration utilizing hypothetical focal points from these writings, and have contributed back to those speculations by using the extravagance of patent information and the patent vital setting [19].

1.3 Patents as Practical Alternatives

Acquiring and using patent privileges requires a progression of decisions that frequently follow a genuine choices rationale (for a survey of the genuine choices writing in administration). Licenses have an exceptionally slanted financial worth, with most of the worth gathered in few licenses. Licenses, then again, are loaded with ex risk vulnerabilities mechanical, business, and legitimate that will quite often be tended to over the long run. Most of protected advancements are specialized or business flounders, and regardless of whether the thoughts are effective, the association's patent(s) might be powerless, restricted, or easy to bypass. Normally, organizations might decide to permit a patent after it has been conceded, however they should know that doing as such may confine their future decisions with respect to the development. Another critical down to earth choice available to organizations from licenses is the capacity to implement the patent by means of prosecution. Notwithstanding, in spite of the fact that prosecution might give a potential return contingent upon arbitration results, it additionally accompanies the risk of patent nullification and the potential negative payout that accompanies it [20].

2. DISCUSSION

The expressions "licenses" and "methodology" or "protected innovation" and "procedure" or "appropriability" and "technique" were looked in a few

examination information bases (ABI/INFORM, EBSCO, EconLit, LexisNexis, ProQuest, Scopus). The point was to gather patent-related examination papers from the executives diaries, yet additionally financial matters diaries (through EconLit) and regulation diaries or regulation surveys (through LexisNexis). All issues of five diaries (Academy of Management Journal, Economics of Innovation and New Technology, Management Science, Research Policy, and Strategic Management Journal) distributed beginning around 2000 were inspected physically as a cross-check. There were only a couple of more articles that were significant after this stage. Following the first inquiries, each article was investigated to guarantee that main examinations with a vital or the executives accentuation were incorporated. Significant exploration was some of the time found by means of references inside different papers recently remembered for this survey or through the creator's own insight.

A patent's "utilization" may legitimately incorporate an assortment of exercises, like assembling, offering, proposing to sell, bringing in, etc. Under the "regulation of counterparts," courts might decipher the patent's extension more generally than its expressed cases. Be that as it may, the tone of this exposition isn't one of legitimate rightness or painstakingness. Perpetually, this technique darkens the center of patent methodology in an enormous dictionary of legal jargon, making it less available to the executive's scholastics. Perusers who are intrigued are coordinated to an extraordinary legitimate book on patent regulation. The expression "protective patent methodology," as portrayed above, doesn't compare well to the "hostile versus cautious" language utilized by patent lawyers practically speaking. This last language is for the most part used to clarify the inspirations for obtaining licenses, with hostile licenses being those that the organization needs to implement against others and protective licenses being those that the firm tries to keep others from suing it. While the word protective may appear to be practically identical to a cautious patent methodology, it should be accentuated that for the guarded methodology is to be trustworthy, organizations should as often as possible case their "safeguard licenses"- that is, go into all-out attack mode. Moreover, as talked about in this segment, the range of conceivable safeguarding strategies is far more extensive than simply procuring licenses consequently.

3. CONCLUSION

The motivation behind this study was to rebuild and comprehend existing patent methodology research, which has starting points in financial aspects, regulation, and the executives. This rebuilding is relied upon to help provide construction and guidance to what in particular is as of now a disconnected and divided area of exploration. The review centers around two critical subjects in the current corpus of patent methodology research: nonexclusive patent procedures and vital worries in patent administration. Moreover, research on every one of these subjects has been connected to (at least one) of three significant patent methodology spaces privileges, authorizing, or implementation where patent-related vital exercises are generally performed. Moreover, despite the fact that each examination might focus on a solitary region, the hypothetical rationales inside each patent methodology subject for the most part apply to every one of the three patent procedure spaces, as indicated by this survey. At long last, two potential regions have been distinguished, to be specific, organizations' overall appropriability strategies and worth creation methodologies, the two of which are beginning to be investigated corresponding to patent methodology. This study advances patent methodology grant by featuring the various associations between patent technique research and the more extensive administration discipline, as well as giving prospects to address key inexplicable examination issues. Subsequently, it fills in as an accommodating guide for future concentrate in this basic field.

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REFERENCES

[1] S. S. Dharmapurikar, A. Arul Kashmir, T. Kumari, V. Kalalawe, M. Kanetkar, and M. K. Chini, "Significance of secondary forces toward improving the charge carrier mobility of Isoindigo based conjugated small molecules," Chem. Phys. Lett., 2021, doi: 10.1016/j.cplett.2021.138621.

[2] V. S. Rana, J. K. Rajput, T. K. Pathak, P. K. Pal, and L. P. Purohit, "Impact of RF Sputtering Power on AZO Thin Films for Flexible Electro-Optical Applications," Cryst. Res. Technol., 2021, doi: 10.1002/crat.202000144.

[3] U. Storz, Biopatent Law: Patent Strategies and Patent Management. 2012.

[4] A. C. Marco, J. D. Sarnoff, and C. A. W. deGrazia, "Patent claims and patent scope," Res. Policy, 2019, doi: 10.1016/j.respol.2019.04.014.

[5] S. Arts, B. Cassiman, and J. C. Gomez, "Text matching to measure patent similarity," Strateg. Manag. J., 2018, doi: 10.1002/smj.2699.

[6] N. Papageorgiadis and W. Sofka, "Patent enforcement across 51 countries – Patent enforcement index 1998–2017," J. World Bus., 2020, doi: 10.1016/j.jwb.2020.101092.

[7] F. Dai, X. J. Gu, H. J. Hu, G. N. Qi, Y. M. Zhang, and H. J. Wang, "Information and strategies supplied patent management platform based on network," Zhejiang Daxue Xuebao(Gongxue Ban)/Journal Zhejiang Univ. (Engineering Sci., 2009, doi: 10.3785/j.issn.1008-973X.2009.10.020.

[8] S. A. Shaikh and T. K. Singhal, "Business intelligence through patent filings: An analysis of IP management strategies of ICT companies," J. Intell. Stud. Bus., 2018, doi: 10.37380/JISIB.V8I2.322.

[9] D. Somaya, "Patent Strategy and Management: An Integrative Review and Research Agenda," J. Manage., 2012, doi: 10.1177/0149206312444447.

[10] F. Michelino, A. Cammarano, E. Lamberti, and M. Caputo, "Knowledge domains, technological strategies and open innovation," J. Technol. Manag. Innov., 2015, doi: 10.4067/S0718-27242015000200005.

[11] F. Jell and J. Henkel, Patent filing strategies and patent management: An empirical study. 2013.

[12] J. Berger, J. D. Dunn, M. M. Johnson, K. R. Karst, and W. C. Shear, "How drug life-cycle management patent strategies may impact formulary management," Am. J. Manag. Care, 2016.

[13] A. Fritzsche and R. Geiger, "The Strategies and Tactics of Patent Management and Their Importance for Competitive

Advantage," 2011.
[14] J. H. Kwon and H. D. Park, "Patent Renewals as Intellectual Property Rights Management Strategy," Acad. Manag. Proc., 2019, doi: 10.5465/ambpp.2019.14858abstract.
[15] L. Wang, Z. Lin, H. Wang, and S. Chen, "Study on influence factors of the implementation of enterprise patent strategy," 2013.
[16] H. Ernst, "Patent information for strategic technology management," World Pat. Inf., 2003, doi: 10.1016/S0172-2190(03)00077-2.
[17] M. Grimaldi, L. Cricelli, M. di Giovanni, and F. Rogo, "The patent portfolio value analysis: A new framework to leverage patent information for strategic technology planning," Technol. Forecast. Soc. Change, 2015, doi: 10.1016/j.techfore.2014.10.013.
[18] S. Kern and R. Van Reekum, "The use of patents in dutch biopharmaceutical SME: A typology for assessing strategic patent management maturity," New Technol. Based Firms New Millenn., 2012, doi: 10.1108/s1876-0228(2012)0000009012.
[19] Y. N. Dhoble, "Cost Management Strategies for Filing, Prosecution and Maintenance of Patents," SSRN Electron. J., 2017, doi: 10.2139/ssrn.2844093.
[20] A. Gillor, "Evolution of strategies for management of the patent arterial duct," Cardiology in the Young. 2008, doi: 10.1017/S1047951108002217.

