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ARTICLE

Managing Intellectual Property in China: A Multidisciplinary Review and Recommendations for Future Research

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Abstract
Despite extensive media coverage on issues related to intellectual property (IP) in China, the academic literature on this topic has been sporadic. Two factors might be at play here. One is the multifaceted nature of IP: as IP is a legal asset with significant implications for firm performance and social welfare, the literature is scattered in various disciplines such as law, economics, strategy, and political science. The other is the unique institutional environment in China: policy-driven investments in IP have resulted in the decoupling of IP as a value appropriation mechanism in market competition and IP as a nonmarket strategy to engage with regulators. This review aims to bring the multiple streams of literature into a structured framework, with a side-by-side comparison with research based in developed countries, mostly in the US. Building on the combined research streams, we then recommend avenues of future research that can potentially speak to a broad audience in innovation, competition, and nonmarket strategies.

摘要
虽然关于中国知识产权的问题在媒体上得到广泛关注, 但系统性的学术研究却依然匮乏。造成这一现象的原因可能包括两个方面。一方面, 知识产权具有跨学科的特性:它作为影响企业绩效和社会福利的重要法律资产, 其相关研究分布于法学、经济学、战略学和政治学等多个领域。另一方面, 中国的制度环境具有独特性: 在政策驱动下, 知识产权在市场竞争中作为价值获取机制的功能与其在非市场战略中作为与监管者互动工具的功能发生分离。本综述旨在将这些分散的研究整合进一个模块化的分析框架中, 并与基于美国等发达国家的相关研究进行对比。在梳理现有文献的基础上, 我们进一步指出未来研究的潜在方向, 以期为创新、竞争和非市场战略等研究领域提供有价值的参考。

Keywords: institutional environment; intellectual property; IP strategy; nonmarket strategy; value appropriation
关键词: 制度环境; 知识产权; IP 战略; 非市场战略; 价值独占

Introduction

For decades, intellectual property (IP) protection in China has attracted significant attention from business leaders, legal professionals, and politicians. As one of the leading bases for exports and destinations for foreign direct investment (FDI), China's IP environment has been crucial in driving value creation and value capture in the global economy. Motivated by strong incentives, Chinese entities are among the most active in patent applications (Fig. 1), having overtaken other countries to take the lead in Patent Cooperation Treaty (PCT) applications (Fig. 2). With 3.6 million patents in force, China surpassed the US in 2021 to become the jurisdiction with the largest number of active patents.

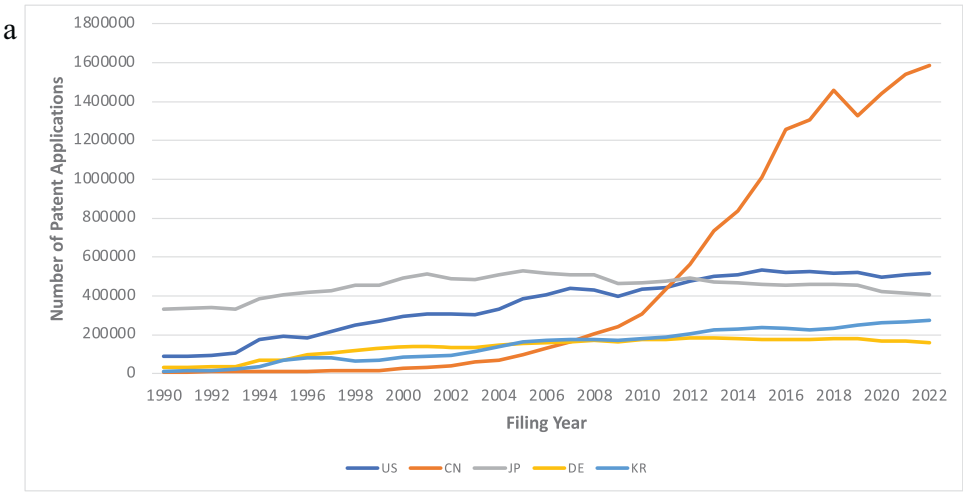

Figure 1. Number of all patent applications

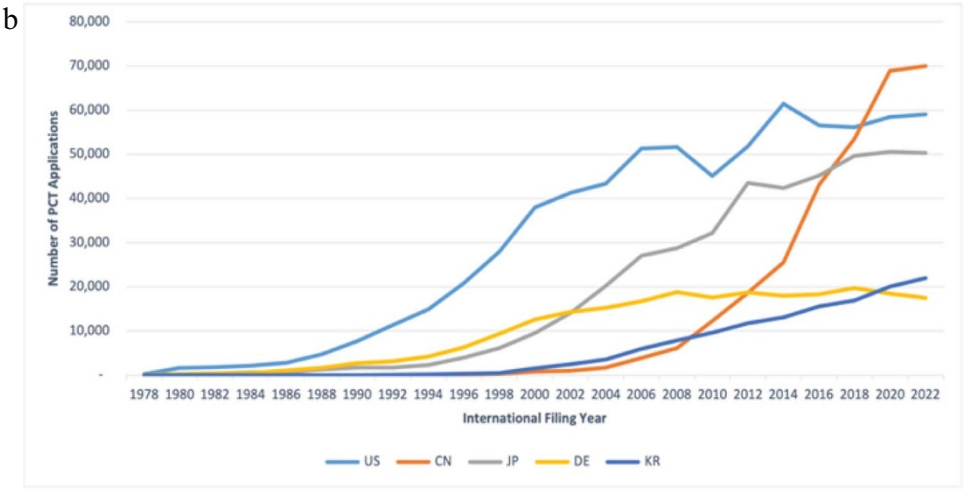

Figure 2. Number of PCT patent applications
Sources: WIPO statistics world intellectual property indicators 2022 and PCT yearly review 2023

fragmented scholarly discussions. This review aims to integrate these diverse research streams for a comprehensive survey of the literature.

To that end, we structure this review into six distinct yet interconnected sections, as portrayed in Figure 3. *Section 1* outlines the IP institutions in China, covering both formal institutions, such as IP systems and government policies, and informal institutions, including customs and social norms. *Section 2* examines firms' strategic decisions regarding the generation, assertion, and transactions of IP in response to the IP institutions in China. These decisions are shaped by heterogeneity at the country, industry, and firm levels, which we discuss in *Section 3*. The relationship among these three sections forms the core structure of this review. For completeness, we further investigate how IP strategies respond to broader environmental factors by examining the influence of non-IP institutions on IP strategies (*Section 4*), the impact of IP institutions on non-IP strategies (*Section 5*), and the implications of IP strategies for firm-level consequences (*Section 6*).

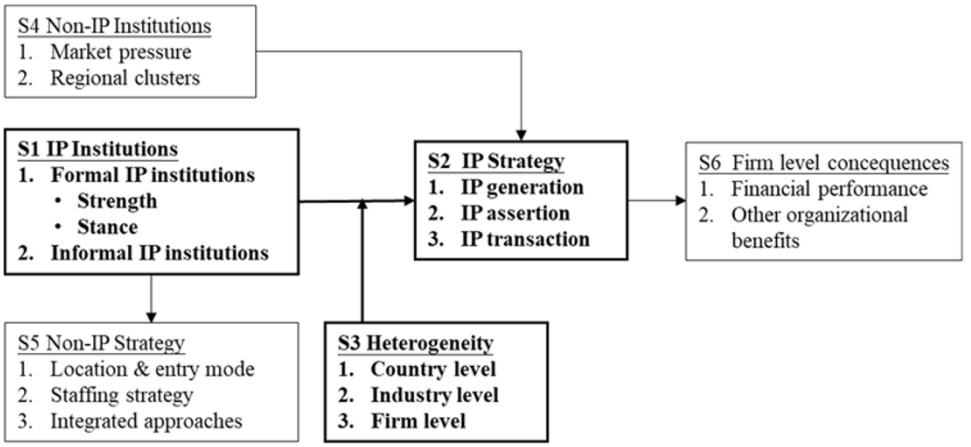

Figure 3. Overall framework for the review

Our review reveals a growing but fragmented body of literature on IP strategy shaped by the Chinese IP institutions. While the field benefits from diverse theoretical perspectives and a wide range of questions, it has limited cross-study dialogue and integration. Most existing studies are empirical, leveraging the complexity and variation inherent in China's IP environment. However, the same contextual richness also leads to diverse findings, shaped by differences in firm samples, time periods, empirical methods, and theoretical perspectives. Mapping the broader landscape allows us to identify conceptual and methodological linkages across studies, thereby building a more cohesive foundation for future research.

It is important to clarify what falls outside the scope of this review: the extensive literature that does not address China's IP institutions or firms' IP strategies in China, but use IP as an empirical proxy for non-IP-related phenomena. As patent data serve as useful indicators of innovation (Zhou, Gao, & Zhao, 2017), they are widely used in various empirical settings. At the individual level, inventor information is frequently used to study talent migration, technology clusters, and collaboration across distance. At the firm level, researchers often use patent counts to assess innovativeness, patent citations to gauge innovation quality, and patent classifications to capture the firms' technological scope. At the national and international levels, various patent-based measures are used to capture technological progress and linkage across economies. While these studies offer valuable insights, their breadth extends beyond the scope of our framework.

The cross-border and cross-disciplinary nature of IP presents significant challenges but also offers unique research opportunities in strategy, management, and international business. For example, in the context of China's distinct institutional environment, there remains a limited understanding of the optimal size of IP portfolios and the appropriate level of IP assertion for firms' long-term performance. In the field of IP management, further research is needed to explore the dynamics between internal and external legal professionals, as well as their interactions with other organizational units, particularly the R&D department and top executives. From an international business perspective, IP could serve as a lens for examining how firms strategically leverage institutional differences across countries. While this review cannot be exhaustive, our goal is to take stock of existing research and, in doing so, pave the way for future scholarly inquiries.

Methods

Given the multidisciplinary nature of IP research, we meticulously explored 37 top-tier journals spanning the fields of law, economics, management, and political science. We then conducted a keyword

Table 1. Lists of journals and keywords

Discipline	*Journal Title*
Management	Academy of Management Annals
	Academy of Management Journal
	Academy of Management Review
	Administrative Science Quarterly
	Global Strategy Journal
	Harvard Business Review
	Journal of International Business Policy
	Journal of International Business Studies
	Journal of Management
	Journal of World Business
	Management and Organization Review
	Management Science
	Organization Science
	Production and Operations Management
	Research Policy
	Sloan Management Review
	Strategic Management Journal
Finance and Economics	American Economic Review
	Journal of Development Economics
	Journal of Economic Literature
	Journal of Finance
	Journal of Financial and Quantitative Analysis
	Journal of Financial Economics
	Journal of International Economics
	Journal of Political Economy
	Quarterly Journal of Economics
	Review of Economic Studies
	Review of Financial Studies
Law	Duke Law & Technology Review
	Harvard Journal of Law & Technology
	Journal of Empirical Legal Studies
	Journal of Law & Economics
	Journal of Law, Economics & Organization
	Yale Journal of Law & Technology

(*Continued*)

Table 1. (*Continued.*)

Discipline	*Journal Title*
Political Science	American Journal of Political Science
	American Political Science Review
	Journal of Politics
Chinese Journal	Management World (in Chinese)
	Studies in Science of Science (in Chinese)
	China Economic Quarterly (in Chinese) China Industrial Economics (in Chinese)
	Economic Research Journal (in Chinese)
	The Journal of World Economy (in Chinese)
Keywords	*IP institutions*: IP, IPR, IP Protect*, intellectual property, protect IP*, IP court, IP system, patent system
	IP strategy: IP strategy, litigation, patent application, patent enforcement, patent license, home bias, lawsuit, trademark, trade secret, copyright
	In combination with one of the words in (China, Chinese)

search on the Web of Science database for papers published in these journals up to the end of 2023. See Table 1 for the full list of journals and the keywords, including various derivatives of these keywords, used in the search. This step generated 139 papers.

Next, we sorted through the papers by reading their abstracts and introductions, keeping only those that are relevant to IP strategies by Chinese companies or otherwise in the Chinese context. To maintain a clear and focused scope, this review centers specifically on IP itself and filters out studies that primarily used IP as a proxy for other constructs. This process left us with, in total, 74 articles concentrating on IP in China or by Chinese companies. We then conducted a review of 6 top-tier Chinese journals focusing on Chinese IP and identified 10 relevant articles.

Finally, to ensure comprehensiveness, we employed a 'snowballing' technique, tracing and incorporating important references cited in the papers from our initial search. We also expanded our scope to include literature on how multinational enterprises (MNEs) manage IP risks. Although these studies are based on global data and not exclusively focused on China, the operations of MNEs in China often serve as the motivating context, making them highly relevant to our review. Our final review includes a total of 106 articles on IP in China. Among these articles selected, the field of management has the most contributions (71), followed by economics and finance (20), political science (7), and law (8). In addition, we included 55 articles on IP from non-China contexts and 8 articles on non-IP topics in China that provide theoretical background and benchmark comparison.

Figure 4 illustrates the trend in the number of academic publications, which shows a steady increase over time. The figure also highlights key milestones in the development of China's IP institutions, such as China's accession to the WTO and TRIPS in 2001, which appear to contribute to the surge in publications related to Chinese IP. Appendix A provides a detailed timeline of major IP-related events in China since 1985, including international treaty accessions, administrative reforms, legal revisions, and state-level IP policies. It also lists representative studies linked to these events. Appendix B presents the growing presence and performance of Chinese firms in global competition, which may further explain the recent rise in academic interest and publications focused on China's IP institutions.

Table 2 summarizes the different disciplinary perspectives on IP, their research focus, and unique research opportunities arising from the Chinese IP environment. Each discipline emphasizes distinct

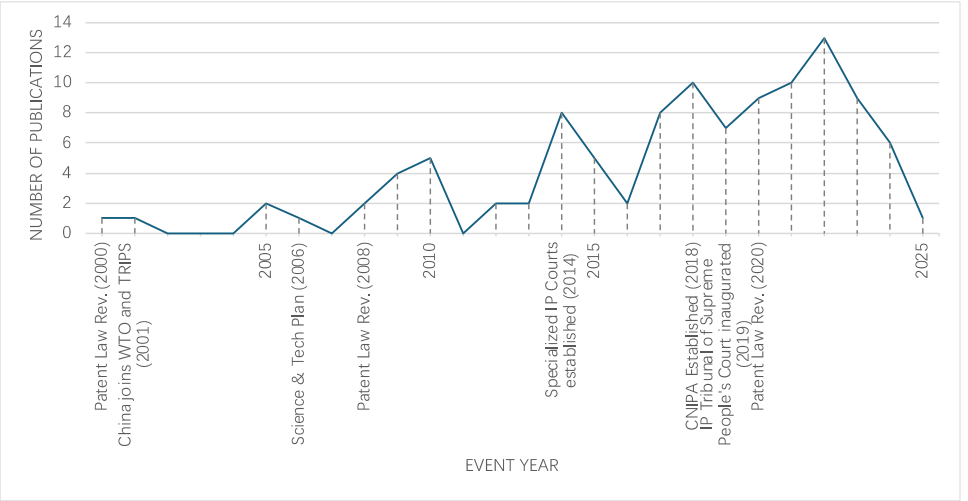

Figure 4. Trend of the literature on intellectual property in China
Source: compiled by authors based on the collected literature

aspects. Studies in law focus on legal frameworks and enforcement. Economics tends to discuss R&D incentives and policy trade-offs at the system level, while strategy research puts more emphasis on firms' competitive and organizational responses. Finally, political science highlights non-market influences such as lobbying and government intervention. Despite these differences, research topics across disciplines have increasingly overlapped in recent years as researchers take interdisciplinary approaches to study institutional dynamics and firm strategy. Therefore, in the following sections, we do not artificially separate studies by discipline. Instead, we structure our review around six key research themes, as portrayed in the analytical framework in Figure 3.

The framework centers on the relationship between Chinese IP institutions (S1) and firms' IP strategies (S2), while highlighting the heterogeneity introduced by a series of country-, industry-, and firm-level characteristics (S3). We begin by providing a comprehensive overview of the Chinese IP institutions, including both formal and informal institutions, analyzed across two dimensions: the strength and stance of IP protection. Next, we examine how both Chinese firms and MNEs respond to China's IP institutions, focusing on three key aspects of IP strategy: IP generation (e.g., patenting), IP assertion (e.g., litigation), and IP transaction (e.g., licensing). Most existing studies concentrate on IP generation, where firms use IP to capture value from innovation (market) or gain regulatory support (non-market). This section also includes a discussion on how firms manage different types of IP, such as patents, trade secrets, and trademarks. To ensure a holistic view, the framework also incorporates non-IP institutions (S4) that affect firms' IP strategy, as well as the non-IP strategies (S5) responding to IP institutions, and the firm-level consequences of the IP strategies (S6). Together, this structure provides a clear and coherent logical flow that ties together distinct conceptual components and narrative among the reviewed research.

The Literature

China's IP Institutions

We distinguish among the concepts of IP policy, IP system, and IP institutions, which vary in scope and analytical focus. IP policy refers to the formal rules and regulations that govern how firms manage, protect, and monetize IP, with a relatively narrow scope centered on legal provisions. The IP

Table 2. Disciplinary perspectives on IP

Discipline	*Perspective*	*Research Focus*	*Research Opportunities Unique to Chinese Context*
Law	Close examination of legal rules, doctrines, or statutory provisions to understand their implications, effectiveness, and potential caveats	The current state of IP protection and specific legal battles	The rapidly evolving legal institutions in China as natural experiments for researchers
Economics	Understanding of welfare trade-offs and, in turn, the optimal design of IP policies	How the length and scope of IP protection influence R&D investments; The conditions under which IP promotes economic growth or, conversely, leads to rent-seeking	China's strong incentive in technological catchup in global competition offer unique settings for welfare analysis
Strategy	Analyzing IP strategies in conjunction with a broad range of firm- and market-specific factors; Understanding these interactions enables firms to develop effective IP strategies in an evolving business landscape.	Heterogeneous strategic choices depending on firm capabilities and industry dynamics; Competitive strategy: offensive patenting to block rivals or defensive patenting to facilitate cross-licensing; Corporate strategy: the role of complementary assets and internal organization in shaping IP choices	The dynamic competition in China offers great opportunity to study heterogeneity across time (pre- vs. post reform or trade war), space (advanced vs. laggard provinces), industries (strategic vs. consumer goods), and market participants (DMNEs, EMNEs, SOEs and domestic private firms).
Political Science	Highlighting the role of non-market strategies, such as lobbying and diplomacy, as integral components of IP strategy	The role of public policy and political connections in innovation and IP	The strong influence of the government on the economy brings nonmarket strategies to the center stage of IP landscape in China.

system is the broader legal and administrative infrastructure that implements IP policies, including patent offices, courts, and enforcement agencies. While IP policies and IP systems are relatively formal, the IP institutions focus on the ability to appropriate value from IP and is a broader concept, capturing both formal and informal elements, such as social norms, tacit agreements, and self-imposed codes of conduct, along with the mechanisms by which they are enforced (North, 1990). To effectively assess China's institutional landscape, this review adopts the broader notion of IP institutions that shape the creation, protection, and exchange of IP.

China's formal IP institutions

Studies on China's IP environment are largely focused on formal IP institutions along the two dimensions: strength and stance.

Strength refers to the overall robustness and effectiveness of IP protection in China. As a global economic powerhouse, China's strength of IP protection has attracted extensive attention. Scholars and practitioners alike have voiced concerns about what they perceive as China's insufficient enforcement of IP rights (Schotter & Teagarden, 2014; Smith, 1999). Fleming (2014) points out that Chinese counterfeits account for the majority of worldwide shipments seized in the US, and China continues to be one of the largest sources of counterfeit products worldwide, according to a 2022 review by the US Trade Representative. While reforms in the past two decades have led to significant progress in legislation and enforcement mechanisms, many studies still regard China's IP environment as relatively weak (Branstetter, Hanley, & Zhang, 2023; Hong, Edler, & Massini, 2022).

Perspectives on the future of IP protection in China are diverse. Many scholars recognize that China's IP system has strengthened over time and is likely to continue improving as the economy develops (Peng et al., 2017). In some respects, China's system is even more efficient than those in the US and Europe, thanks to a shorter patent pendency period – the time from application to grant – and lower patent litigation costs (Prud'homme, 2019a; Prud'homme, Tong, & Han, 2021). Chinese courts are also more ready to issue preliminary injunctions during litigation. This is in contrast to US courts, which have been reluctant to issue injunctions after eBay v. MercExchange (Mezzanotti, 2021). Yet, Brander et al. (2017) caution that these advancements may be undermined by limited judicial independence, which could hinder IP litigants from securing fair rulings. Similarly, Li and Alon (2020) warn that government intervention and broader political priorities may overshadow independent legal processes. In contrast, Zhao (2020) challenges this view, arguing that while China may operate under an authoritative regime, the government does not have direct control over innovation. As the government, MNEs, and local competitors strategically adapt to policy changes, strong IP protection may ultimately align with the government's interests, especially given its reliance on economic growth for legitimacy.

From a statistical point of view, some scholars have also observed that criticisms of the Chinese IP system's weaknesses have been amplified by external perceptions. Cheng, Yeung, and Zhao (2022) find that, since the 2016 presidential election in the US, there has been a five-fold increase in media coverage of China's IP violations, even though there was no noticeable increase in actual court cases. Furthermore, they find that an IP case with a Chinese defendant would receive five times more media coverage than a similar case with a foreign defendant from other countries. Although such findings do not necessarily endorse China's IP regime, it is entirely possible that the intensive media coverage leads to more scrutiny by businesses operating in China or working with Chinese partners, further increasing the number of IP cases against Chinese defendants.

Such divergent views on the strength of China's IP institutions can partly be explained by variations in the research subject: what is protected, where it is protected, and how to receive protection. First, the level of IP protection in China varies across different IP types. While patents often dominate discussions of Chinese IP reforms, other forms of IP, including trade secrets and copyrights, are relatively difficult to enforce. For example, trade secret cases have been notably underrepresented in Chinese courts (Bai & Da, 2010), especially cases involving foreign plaintiffs. Indeed, a study of 55 misappropriation cases from 2013 to 2021 found only two with foreign claimants (Wang, 2023). Observers attribute this low litigation rate to fragmented legal frameworks, high evidentiary requirements, and complex enforcement processes (Chow, 2014). Although the 2019 amendment to the Anti-Unfair Competition Law (AUCL) and the 2020 Trade Secret Provisions issued by the Supreme People's Court (SPC) introduced burden-shifting mechanisms, companies still face high hurdles in proving both the existence of a trade secret and its unauthorized use. The heavy reliance on expert opinions in complex technical cases raises additional concerns about judicial consistency and impartiality.

Second, there are notable regional disparities in the enforcement of IP protection, although these disparities have been gradually reduced with the establishment of specialized IP courts. Unlike in some countries where plaintiffs engage in strategic 'forum shopping' (Somaya & McDaniel, 2012; Sytch & Kim, 2021), jurisdiction in China is typically limited to the defendant's place of residence or the location of the alleged infringement. This constraint, combined with significant regional variation, leads to substantial differences in litigation outcomes (Bian, 2018; Love, Helmers, & Eberhardt, 2015). For example, Ang, Cheng, and Wu (2014) report that plaintiffs' success rates in Chinese courts range from 25% to 87.5%, reflecting disparities in judicial expertise, local economic priorities, and the types of cases being litigated. To address such inconsistencies, China established specialized IP courts aimed at improving the quality, consistency, and credibility of IP adjudication. This institutional reform marks a key step toward strengthening judicial independence and improving court certification standards (see Appendix A for a timeline of judicial reforms). Although these courts do not consistently favor patentees, they tend to award higher damages when patentees do prevail

(Zhang, Li, & Xu, 2022). This parallels developments in the US following the creation of the Court of Appeals for the Federal Circuit (CAFC) in 1982, which was intended to bring greater uniformity to patent law. Although the CAFC was widely seen as a move to strengthen IP protection, there was no clear evidence that it favored patentees in infringement cases (Henry & Turner, 2006).

Finally, differences in the examination process have also led to variation in IP quality. The caseloads borne by Chinese patent examiners far exceed those managed by their counterparts in the US and Europe (Branstetter et al., 2023), which can lead to high variance in examination time and quality control. Analyzing pharmaceutical invention patents submitted to the China National Intellectual Property Administration (CNIPA) over three decades, Zhu, Malhotra, and Li (2022) find that applications with a moderate number of International Patent Classification (IPC) codes progress more smoothly and face fewer revisions. The underlying logic is that too few IPC codes create ambiguities for examiners who lack sufficient contextual information, while an overabundance of codes can overwhelm examiners with unnecessary complexity. Studies in the US setting echo the behavioral component of the patent examination process. For instance, applicants can 'steer' their submissions toward specific art unit, exploiting variations in examiner strictness or leniency (Mehrle, 2019). Some applicants even cite patents reviewed by certain lenient examiners for the purpose of having the same examiners assigned to the new application (Barber & Diestre, 2022).

Beyond debates and characterizations of IP strength itself, scholars across various disciplines have shown strong interest in examining its direct impacts at both macro and micro levels. At the macro level, scholars examine how strengthened IP protection contributes to economic growth (Ang et al., 2014), social welfare (Hu, Pray, Huang, Rozelle, Fan, & Zhang, 2009), market participation (Alfaro, Ge, Chen, Hong, & Steinwender, 2024), and international capital flows (Papaioannou, 2009). At the micro level, existing research suggests that stronger IP protection in China has a positive impact on firm performance, particularly for high-tech enterprises. Specifically, it enhances innovation performance by reducing R&D spillover losses and alleviating external financing constraints (Wu & Tang, 2016; Zhou, Wang, & Zhang, 2022), while improving financial performance primarily through increased information transparency and reduced uncertainty for external stakeholders (Li, Yan, & Gu, 2014). Given this review's focus on IP management, we will expand on the micro-level analyses by discussing firms' IP strategies (*Section 2*), non-IP strategies (*Section 5*), and firm-level consequences of IP strategies (*Section 6*) in greater detail.

Stance refers to the position or orientation that IP institutions adopt in administering and enforcing IP rights. Studies on China's IP stance have paid particular attention to China's legal institutions and enforcement agencies toward foreign firms. Indeed, much of the critique surrounding China's IP protection arises from the perception that the system favors domestic competitors at the expense of MNEs operating in China or competing with Chinese firms. Scholars point to challenges such as unfair competition from Chinese imitators (Kim & Mudambi, 2020; Teece, 2022) and inadequate damage awards for infringements on foreign inventions (Branstetter et al., 2023). Prud'homme (2019b) uses the phrase 'foreign-friendliness paradox' to depict an IP system that offers improved enforcement and yet constrains MNEs with additional costs and restricted appropriability.

Further complicating the landscape is an IP system that remains closely aligned with state and local interests (Sun, Choi, Guo, Guo, Zou, & Cui, 2023; Yu, Wu, Chen, & Lewin, 2022), reinforcing the perception that it systematically favors domestic firms (Brander et al., 2017; Li & Alon, 2020). This uneven playing field begins at the application stage: scholars have observed that domestic patent applicants often experience higher grant rates and reduced uncertainty (Yang, 2008), or shorter processing times (Liegsalz & Wagner, 2013), compared to their foreign counterparts. Moreover, IP is frequently employed as a tool of industrial policy, supporting the technological advancement of domestic firms (Brander et al., 2017; Li & Alon, 2020). A prominent example is China's 'market for technology' mandate, which requires foreign firms to transfer specific technologies to local partners as a condition of market access, a practice that many MNEs view as a form of 'forced' technology

transfer (Holmes, McGrattan, & Prescott, 2015; Li & Alon, 2020; Prud'homme & Von Zedtwitz, 2019; Prud'homme, Von Zedtwitz, Thraen, & Bader, 2018).

In recent years, as US-China tensions intensify, attention has shifted from the government agencies to the judiciary. Accusations abound that China leverages its judiciary to shield domestic businesses and 'weaponize' courts against foreign IP, particularly in sensitive high-tech domains, thereby safeguarding local firms in the broader race for technological dominance (Woo & Michaels, 2023). This narrative underscores the broader concern that legal institutions in China may be subject to political influence, and China's assertive approach to litigation on standard essential patents (SEPs) is starting to shape global competition (see Appendix B for a detailed description).

While concerns about systemic bias persist, not all evidence supports the view that China's IP system is uniformly prejudiced against foreign entities. For instance, Yang and Sonmez (2018) find that, contrary to popular belief, foreign patent applicants were actually more likely to have their applications granted during the period from 2003 to 2014. Similarly, research suggests that the longer wait times experienced by foreign applicants may be due more to delayed responses on their part than to preferential treatment for domestic filers (He, Tong, Zhang, & He, 2018; Liegsalz & Wagner, 2013; Tong, Zhang, He, & Zhang, 2018). In the legal arena, foreign plaintiffs may even enjoy an advantage. Bian (2018) reports that foreign patent holders often receive comparable or higher damage awards than their Chinese counterparts. A study of IP litigation in the Shenzhen court finds no evidence of local protectionism (Zhang, Crupi, & Di Minin, 2020). On the contrary, foreign firms may benefit from international scrutiny and external pressure, which help mitigate judicial bias and improve their chances in disputes against domestic rivals (Sun et al., 2023).

Discussions surrounding the stance of an IP system are by no means confined to China. Similar concerns have been raised for IP systems in the US (Aoki & Prusa, 1993; Choudhury, Jandhyala, & Nandkumar, 2025; Takenaka, 1992) and Canada (Mai & Stoyanov, 2019), where the courts are often perceived as biased against foreign litigants. The evidence is mixed: while Clermont and Eisenberg (1996) argue that xenophobia is not a significant factor in US courts, other research points to clear disparities. In jury trials, for example, domestic plaintiffs tend to have higher win rates against foreign defendants than foreign plaintiffs do against domestic ones (Bhattacharya, Galpin, & Haslem, 2007; Moore, 2002). Moreover, broader ethnic prejudices may also shape outcomes in the US legal system. Fang and Li (2021) find that defendants with Chinese names are more likely to be prosecuted under the Economic Espionage Act despite insufficient evidence, pointing to potential racial profiling in the enforcement of IP-related laws.

China's informal IP institutions

Informal IP institutions refer to the unwritten rules, norms, and practices that shape how IP is interpreted, shared, and enforced in practice, even in the absence of formal legal rules. While the English word patent means 'open letter' (information disclosure under legal protection), the translation means monopoly or special rights in China, Japan, and Korea. Thus, the role of IP in market competition and nonmarket strategy varies widely across locations (Hall, Helmers, Rogers, & Sena, 2014). For example, patenting is considered a more effective way to protect innovation in Japan than in the US (Cohen, Goto, Nagata, Nelson, & Walsh, 2002). Such informal institutions play a critical role in influencing IP management in China.

One important line of research explores how cultural norms shape firms' IP practices. Yang (2005) offers a case-based comparison of Chinese and US managers in wholly owned enterprises and their licensing firms operating in China, showing how differences in power distance, individualism vs. collectivism, and communication styles often lead to conflicts over contractual obligations, licensing agreements, and piracy. The study underscores the critical role of cultural awareness in cross-border IP management. Expanding on this theme, Delerue and Lejeune (2011), in an analysis of 297 R&D-intensive biotechnology firms, find that national cultures – particularly levels of individualism, assertiveness, and uncertainty avoidance – influence the extent to which firms adopt secretive

practices. Specifically, firms in cultures with higher individualism and assertiveness, and lower uncertainty avoidance, are more likely to employ extensive secrecy measures. At the organizational level, interpersonal trust and well-designed reward systems further support the use of secrecy. Although not China-specific, these insights align with China's evolving cultural and business environment, highlighting how social and organizational norms can be as influential as formal legal institutions in shaping IP strategy.

Related to cultural and organizational norms, another critical facet of informal institutions is public awareness, or the lack of, regarding IP rights. In the digital image sector, for example, Luo and Mortimer (2016) find that many small business infringements stem not from willful misconduct but from limited understanding of licensing requirements. Although their study is not China-specific, it shows how insufficient dissemination of IP knowledge can lead to unintentional violations, particularly in fast-growing industries. These insights suggest that strengthening informal information channels, such as industry associations, professional training, and peer learning, may be more effective in curbing inadvertent IP breaches than formal legal frameworks.

Research on trademarks in China illustrates the complex interaction between formal regulations, local incentives, and workforce dynamics. Chang (2014) identifies several statutory challenges, such as the first-to-file system, the single-class filing requirement, and high thresholds for recognizing well-known marks. However, even with legal reforms, enforcement often falls short due to local protectionism and weak domestic incentives for IP compliance. Informal dynamics, such as regional authorities prioritizing local economic interests, can undermine the effectiveness of formal legal frameworks. Additionally, a growing body of research explores how the changing workforce influences IP practices. For example, leveraging China's 1999 higher education expansion as a natural experiment, Shu and Wang (2023) show that industries with higher human capital tend to file more trademarks, driven by enhanced R&D investment and employee training. In this case, the informal institution at play is the cultural emphasis on education and technical know-how, which encourages firms to adopt formal IP mechanisms like trademarks to protect their brand equity. Taken together, these studies illustrate the powerful role of informal institutions in shaping China's IP landscape, showing how social norms, regional political dynamics, and workforce capabilities collectively influence the effectiveness of formal mechanisms in enforcing IP.

The Impact of IP Institutions on Firms' IP Strategy

IP strategy is considered an important mechanism to appropriate value from innovation and sustain competitive advantage (Pisano & Teece, 2007). In this section, we analyze how Chinese IP institutions influence the IP strategies adopted by both domestic Chinese companies and MNEs operating in China. To structure our analysis, we delineate IP strategy into three core domains: IP generation (the application and acquisition of IP rights), IP assertion (the enforcement and defense of IP rights), and IP transaction (IP transfer, licensing, and IP-based collaboration).

IP generation

IP generation refers to the process by which firms develop and grow their IP portfolios, encompassing patents, trademarks, copyrights, and trade secrets. While these different IP forms all play important roles in firms' IP strategies, academic research has focused on patents, mostly for practical reasons. Patent applications and grants are systematically documented and publicly available by national and international patent offices (e.g., USPTO, EPO, WIPO), not to mention a wide range of data providers, such as Google Patents and Derwent Innovation, that make the data easy to access. In contrast, copyright registrations are not always required for protection, and the subjects under protection vary widely from software to art, making empirical comparison difficult. Trade secrets, by definition, are confidential. Despite their strategic importance, they are not observable

until litigated. As a result, almost all empirical studies included in this review are based on patent data.

Motivation for IP generation

In the Chinese context, firms' IP generation in response to the institutional environment is typically driven by two distinct yet complementary mechanisms.

First, firms pursue IP creation as a means to capture value and enhance competitiveness in the marketplace (Hu & Jefferson, 2009). As IP protection improves in China, firms are increasingly motivated to pursue patents as a means of appropriating value from innovation (Hu & Jefferson, 2009; Hu et al., 2009). With stronger enforcement mechanisms in place, patents become more effective tools for securing competitive advantage and extracting returns from R&D investments. This perceived value drives not only higher patenting activity but also greater willingness to share knowledge, as firms trust that their innovations will be protected (Kafouros, Wang, Piperopoulos, & Zhang, 2015). Similar dynamics apply across different types of IP and industries. Rong, Huang, Hao, Xie, and Li (2025) demonstrate that stronger copyright protection promotes originality in short video content on digital platforms. However, such trust in the IP system tends to develop gradually. Exposure to international practices, particularly in industries with high levels of FDI, can accelerate domestic firms' recognition of patents as strategic assets for value capture. In these contexts, firms gain practical insights into how IP can be leveraged to appropriate value from innovations, leading to higher patenting activity (Hu & Jefferson, 2009). Over time, positive experiences with patent enforcement further strengthen firms' confidence in the system (Yin, Yang, Yan, & Deng, 2023), reinforcing their incentives to patent.

Over the years, MNEs have demonstrated higher sensitivity to institutional environments than domestic firms. Unlike domestic firms that remain embedded in China's informal institutional networks, MNEs exhibit greater responsiveness to formal IP reforms and are more inclined to leverage these changes for value appropriation (Zhao, 2020). This differential sensitivity became evident following the 2001 strengthening of utility model patent protection, after which MNEs increased their filings for utility model patents at a significantly higher rate than their domestic counterparts (Huang, Geng, & Wang, 2017). In addition to institutional responsiveness, competitive dynamics are also a key driver of MNE patenting activity. Studies show that the rise in foreign patent filings in China is largely motivated by efforts to counter competitive threats (Cai, Sarpong, Tang, & Zhao, 2020; Hu, 2010), as well as to signal a firm's confidence in the Chinese market and its willingness to enforce IP rights if challenged (Keupp, Friesike, & Von Zedtwitz, 2012).

University patenting in China has followed a similar upward trajectory. Beginning in the early 2000s, China gradually implemented policies comparable to the US Bayh-Dole Act, granting selective universities ownership over inventions resulting from government-funded research. These reforms aimed to promote technology commercialization by facilitating the licensing and transfer of academic inventions. Evidence suggests that universities adopting such policies experienced significant increases in patent filings, patent citations, and revenues from technology transfer (Yi & Long, 2021).

Second, firms are also influenced by nonmarket incentives, seeking to capitalize on government subsidies and strengthen engagement with regulatory authorities (Chen et al., 2021). A significant share of patenting activity in China is driven by government incentives rather than market-based innovation. Because IP-based metrics, such as the number of invention patents per ten thousand residents, are often used as an indicator of local economic and social progress (Huang, 2017), local governments have strong incentives to boost patent counts. These incentive policies are often delivered through administrative pressure or financial rewards, with large variation across regions (Ang et al., 2014; Ang, Jia, Yang, & Huang, 2023; Li, 2012). Policies such as subsidies for patent applications (Long & Wang, 2015; Zhang & Zheng, 2018; Zhou & Dong, 2024), tax breaks for high-tech firms (Chen et al., 2021), and support for indigenous innovation (Ang et al., 2023) have led to a sharp rise in IP filings.

Firms, in turn, respond by prioritizing appearances over substance. For instance, when the government offers corporate income tax cuts to firms that report R&D investment over a certain threshold, firms frequently relabel other expenses as R&D just to reach the threshold (Chen et al., 2021). There is also 'end-of-year patenting,' a spike in applications by domestic entities in December aimed at meeting annual targets (Sun et al., 2021). While these efforts succeed in increasing raw counts, several studies have also identified the downside, including lower novelty (Ang et al., 2023), diminished patent quality (Sun et al., 2021; Wei, Xu, Yin, & Zhang, 2023; Zhang & Zheng, 2018), reduced international influence (Fang, Song, Tao, & Zhang, 2024), and weaker correlation between patents and labor productivity (Hu, Zhang, & Zhao, 2017). Further, in the presence of count-based incentives, firms tend to favor more frequent, incremental innovations over riskier but potentially more valuable radical ones (Branstetter et al., 2023; Cao, Jiang, Li, & Zhu, 2024). In this context, patenting becomes as much a tool for signaling compliance and securing benefits as it is for protecting genuine innovation.

While patent subsidies are not unique to China, their scale and impact differ markedly from those in other regions. For instance, several EU member states also offer subsidies and tax incentives, particularly aimed at supporting local patenting by small firms. However, as Prud'homme (2016) notes, China's IP-related policies operate on a much larger scale and have disproportionately emphasized quantity over quality, leading to a more pronounced tradeoff between patent volume and fundamental progress in innovation.

Managing different types of IP

A growing body of research highlights how Chinese firms strategically combine multiple IP tools, particularly in environments characterized by weak formal enforcement. In such contexts, research shows that firms tend to favor trade secrets over patents due to their indefinite duration and the absence of disclosure requirements (Anton & Yao, 2004; Png, 2017; Tse, Meyer, Pan, & Chi, 2024). This preference is especially salient in sectors where technological knowledge is tacit and easily shielded.

Rather than relying on a single mode of protection, many firms actively manage a portfolio of IP tools to optimize both legal coverage and strategic flexibility. CATL's response to US trade restrictions offers a compelling example of such orchestration. The company combined the licensing of patents and manufacturing know-how with enhanced trade secret protections through tighter internal security protocols (IAM, 2024). This illustrates the complementarity of IP mechanisms in practice. Similarly, Xiao, Han, Li, Ran, Zhou, and Tong (2024) show that patents and trademarks can be used synergistically, as trademarks bolster brand recognition and market acceptance, thereby amplifying the commercial value of patented innovations.

This integrated use of IP mechanisms is not unique to China or Chinese firms. Research in the US and Europe has long emphasized the trade-offs among different IP mechanisms. For example, US survey data suggest that firms often perceive trade secrets as more effective than patents for protecting innovation (Mezzanotti & Simcoe, 2023), particularly in industries where secrecy is viable. Beyond this binary comparison, firms also weigh the merits of patents versus copyrights, with the former better suited to technical inventions and the latter to creative expressions (Boudreau, Jeppesen, & Miric, 2022). These tradeoffs aside, the prevailing trend across contexts is toward strategic integration: Firms often deploy patents, trade secrets, trademarks, and copyrights in a complementary manner to form a comprehensive IP strategy (Mezzanotti & Simcoe, 2023). One notable difference about China is that firms are allowed to apply for an invention patent and a utility model patent simultaneously for the same technology (Wang & Li, 2024). Invention patents, which correspond to utility patents in the US, require significant technological advancement and rigorous examination. Meanwhile, utility model patents cover incremental technical improvements, with a lower threshold for application and grant. Thus, utility model patents are often included in the patent portfolio to boost short-term patent counts for strategic reasons (Huang et al., 2017; Tan & Qian, 2020).

IP assertion

IP assertion refers to the strategic actions firms undertake to enforce their IP, whether to strengthen negotiation positions or extract value through legal channels. This involves making calculated decisions about whether to initiate litigation, choosing where to litigate and whom to litigate against, and managing the risks inherent in the process. Existing research shows that in Chinese patent litigation, foreign companies primarily appear as enforcers rather than infringers (Love, Helmers, & Eberhardt, 2015). Moreover, these foreign plaintiffs may seek to attract public attention and apply external pressure to counter potential domestic bias, thereby enhancing their chances of success in Chinese courts (Sun et al., 2023).

While most existing research on strategic IP assertion has been conducted in non-China contexts, it nevertheless provides valuable insights into how firms strategically engage in IP assertion in China. For plaintiffs, one important dimension is the strategic selection of legal venues, regulatory bodies, or government agencies that are perceived to be more favorable to their claims, a practice commonly referred to as 'forum shopping' or 'institutional targeting' (Somaya & McDaniel, 2012). For instance, plaintiffs may prefer jurisdictions with more conservative judges, who historically lean toward patent holders (Sag, Jacobi, & Sytch, 2009). Sytch and Kim (2021) extend the logic of legal venue selection by demonstrating that plaintiffs also consider social ties between legal professionals and judges, as shared educational or career backgrounds can foster implicit bias and increase the likelihood of favorable outcomes. In addition to venue selection, firms also make strategic choices about whether to pursue or settle a lawsuit. Somaya (2003) finds that firms with strategically valuable patents, particularly those with high citation counts, are more inclined to reject settlement offers and proceed with litigation to preserve their exclusive rights and deter potential infringers.

Defendants, too, engage in strategic behavior to influence outcomes. Cohen and Gurun (2024) demonstrate how companies facing jury trials may target advertising efforts toward local populations from which jurors are likely to be drawn, aiming to cultivate a favorable brand image. For instance, Samsung, frequently litigating in the Eastern District of Texas, has sponsored local events like a Winter Festival and even funded an ice-skating rink prominently located near the courthouse – subtle yet impactful efforts to sway public sentiment in its favor.

The Chinese legal system is different from the US setting, where the most research on IP litigation is based, in two important aspects. On the plaintiff side, it imposes jurisdictional constraints, typically limiting venue to the defendant's residence or the site of alleged infringement, which restrict firms' ability to engage in strategic venue selection. On the defendant side, China employs a professional judge system, which means defendants cannot employ strategies like local advertising campaigns to influence juror sentiment. While this challenges the generalizability of existing findings, it also opens up opportunities for context-specific research on how firms navigate IP assertion under such institutional environment.

IP transaction

IP transaction refers to the buying, selling, and licensing of IP in the market for technology. This encompasses the transfer of IP rights through private agreements as well as through open-market mechanisms. Chen, Zhang, Feng, Zhang, and Ning (2022) examine the evolution of technology transfer in China through an in-depth case study of the Chinese Academy of Sciences (CAS). Their analysis highlights how CAS's multi-tiered Technology Transfer Systems (TTSs) have evolved across three major modes of technology transfer: the CAS-region cooperation mode, which focuses on partnerships with local governments and firms to spur regional development; the incubation ecosystem mode, which builds integrated support systems spanning R&D to commercialization; and the platform-driven mode, which leverages digital and institutional platforms to enhance knowledge diffusion and foster collaboration among academia, industry, and research entities.

Heterogeneity in the Impact of IP Institutions on IP Strategy

The relationship between IP institutions and the strategic management of IP is not monolithic; instead, they display significant heterogeneity influenced by an array of contingent factors. This heterogeneity is multidimensional, manifesting across country, industry, and firm levels.

Country level

Since IP environment is largely a country-level measure, country-level contingency effects often emerge through cross-country relationships. Several recent studies, many of which include China as country samples, demonstrate how these dynamics play out in the global context. Analyzing data from 879 innovation-intensive MNEs over a decade, Bruno, Crescenzi, Estrin, and Petralia (2022) find that when MNEs from strong IPR home countries operate in weak IPR host countries, distance between home and host countries' IPR regimes attenuates the innovation benefits of strategic asset seeking activities, primarily due to higher coordination and knowledge protection costs.

Industry level

Patent activity under IP institutions in China also varies significantly across industries, with sectors like telecommunications equipment and computers historically dominating invention patent filings due to both high technological opportunity and a stronger propensity for strategic patenting (Hu et al., 2017). This pattern is also evident in the US market, where firms in 'discrete' product industries (e.g., chemicals) primarily use patents to block substitute technologies, while those in 'complex' product industries (e.g., telecommunications equipment, semiconductors) more often use patents as leverage to initiate negotiations or cross-licensing with rivals (Cohen, Nelson, & Walsh, 2000).

Firm level

Among studies examining the relationship between IP institutions and firm strategy, firm-level heterogeneity has received the most attention. Broadly speaking, this literature typically focuses on three dimensions: the nature of R&D activities, internal organizational structure, and political connections. First, the nature of a firm's R&D activities influences its approach in response to Chinese IP institutions. Firms engaged in frontier R&D tend to prioritize legal enforcement to safeguard proprietary knowledge, whereas those focused on reverse engineering or manufacturing often place greater emphasis on market access (Zhao, 2010). This distinction also exists in academic-industry collaborations, where openness and knowledge sharing are key, stronger IP enforcement can enhance trust and facilitate resource exchange between firms and universities or research institutes (Kafouros et al., 2015).

Second, a firm's internal organization, i.e., the internal architecture to structure, coordinate, and govern its internal resources, shapes how it navigates different external environments. MNEs in particular leverage their geographically dispersed structures to mitigate country-specific IP risks (Feinberg & Gupta, 2009; Schotter & Teagarden, 2014). By decomposing technologies into complementary components, MNEs ensure that no single unit has full access to the complete technology, thereby limiting the chance of imitation (Sun, Debo, Kekre, & Xie, 2010). Such technological complementarity, coordinated through strong internal linkages, helps buffer the negative effects of IP risks on innovation (Alcácer & Zhao, 2012; Zhao, 2006). Moreover, internal social networks (Yan, Li, & Zhang, 2022) add a layer of organizational complexity that further reduces imitation risk. Note that these integration strategies also raise coordination costs, so they may diminish the benefits of foreign R&D in jurisdictions with strong IP protection, to the extent of being counterproductive (Belderbos, Park, & Carree, 2021).

Finally, political connection is a salient dimension of firm heterogeneity in the Chinese context. Political connection refers to formal and informal ties with the government (Wei et al., 2023), including state ownership, state affiliation, and having current or former officials on the top management team. The relationship between political connections and legal IP protection is nuanced. On one

hand, formal and informal ties with government officials can grant firms access to privileged information, facilitate negotiations with regulators, and mitigate political risks (Jia, Zhao, Zheng, & Lu, 2022; Wei et al., 2023). Facing lower expropriation risk, the politically connected firms are less reliant on legal mechanisms to protect their innovation. In this sense, political affiliation and legal IP protection function as substitutes. This substitution effect is evidenced by substantial innovation increases following SOE privatization, particularly in cities with stronger IP protection, and by SOEs generally producing lower-value patents (Fang, Lerner, & Wu, 2017; Hu & Jefferson, 2009; Huang, Huang, Shen, & Mao, 2021).

On the other hand, politically connected firms are more inclined to pursue legal action through the courts, suggesting a complementary relationship between political ties and judicial processes (Ang & Jia, 2014). This complementary effect is further supported by evidence showing that firms with higher state ownership proportions produce more novel patents after the 2006 innovation procurement policy (Jia, Huang, & Zhang, 2019). In strategic sectors, government coordination has also promoted collaborative innovation among domestic entities, leading to an increase in patent applications by government-affiliated firms (Genin, Tan, & Song, 2022). This echoes findings in the global telecommunications industry, where the positive effect of institutional quality on firm patenting is particularly pronounced for firms receiving state investment (Clò, Florio, & Rentocchini, 2020).

More specific to the Chinese context, the influence of political connections varies across governmental hierarchy. The administrative level of the government issuing the policies also matters for the innovation and IP activities of connected firms. Higher-tier governments typically prioritize technological advancement and can offer greater resources and strategic guidance, while lower-tier governments are more likely to emphasize revenue generation and profit maximization (Wang, Kafouros, Yi, Hong, & Ganotakis, 2020).

In summary, the existing literature reveals that the relationship between IP institutions and firm strategy varies substantially across different contexts and firm characteristics. Alternatively, we can interpret the findings as moderating effect of IP institutions on other contingencies. These heterogeneities reflect the complex interactions between various factors and IP institutions, where IP institutions both moderate and are moderated by other contingent factors.

The Effect of Non-IP Institutions on IP Strategy

In *Section 1*, we examined the IP institutions that shape firms' strategies for managing IP. However, firms' IP strategies in China are also shaped by broader institutional and market environments that fall outside the IP institutions. The existing literature on these non-IP institutions primarily emphasizes two key factors: pressures from capital and product markets, and dynamics in regional clusters.

Capital market pressures are an important driver of patenting behavior. These market forces influence not only whether firms pursue patents, but also the timing, nature, and strategic purpose behind their patenting decisions, driving firms to align their IP behavior with external expectations, such as signaling innovation capacity or securing favorable valuation outcomes. For instance, Long and Zhang (2021) find that regulatory pressures in the IPO environment serve as a critical non-IP driver of patenting behavior. When capital markets place heightened emphasis on innovation capacity, using patent counts as a key evaluation metric, firms preparing for IPOs are incentivized to strategically inflate their patent portfolios, particularly through lower-quality non-invention patents, to enhance their approval prospects and offering prices (Long & Zhang, 2021). Similarly, Tan and Qian (2020) show that capital market environments with more relaxed short-selling mechanisms function as important contextual factors shaping patenting behavior. In such settings, firms are more likely to respond to market pressure by strategically filing patents to mitigate perceived risks and sustain firm valuation. These findings are consistent with international evidence on the certification role of patents

in external financing, as shown in the contexts of US (Hochberg, Serrano, & Ziedonis, 2018; Hsu & Ziedonis, 2013) and Europe (Useche, 2014).

Product market competition also influences IP strategy. Hu (2010) finds that rivalry among foreign firms operating in China contributed to around 36% of the annual growth in foreign patent filings, indicating the strategic use of patents for both offense and defense in response to intensified market competition. Similarly, Kim (2022) observes that leading firms in East Asia (e.g., South Korea and China) increasingly pursue technology standardization as a post-catch-up strategy amid intensifying global competition.

At the regional level, industrial clusters present both opportunities and challenges. On one hand, agglomeration fosters knowledge flows and cooperative ties, exemplified by a 24-firm IP protection alliance in Tonglu that pledged mutual enforcement and non-infringement (Wei & Li, 2018). On the other hand, geographic proximity can also heighten the risk of unwanted knowledge outflows, prompting technologically advanced firms to either maintain geographic distance from competitors (Flyer & Shaver, 2003; Shaver & Flyer, 2000) or develop organizational mechanisms that safeguard proprietary information (Alcácer & Zhao, 2012). Wang and Zhao (2018) further demonstrate that large internal technological distance, coupled with strong internal linkages, allows firms to benefit from local spillovers while minimizing vulnerability to rivals.

The Effect of IP Institutions on Non-IP Strategy

IP institutions not only affect firms' IP strategies, but also a broad range of non-IP approaches. These include decisions related to location choice and entry modes, staffing decisions, and integrated protection mechanisms – each reflecting how firms adapt to environments where legal IP enforcement remains inconsistent or underdeveloped.

First, location choice represents a key strategic response through which MNEs navigate heterogeneous IP institutions, but the empirical findings on this relationship are mixed. While weak IP protection can deter foreign investment (Papaioannou, 2009), an environment characterized by frequent litigation may also dissuade entry (Onoz & Giachetti, 2023). The relationship varies by firm origin and strategic priorities. Emerging economy MNEs typically favor countries with stronger IP protection (Estrin, Meyer, & Pelletier, 2018), yet Chinese firms investing in Former Eastern Bloc countries prefer weaker IP institutions, likely to reduce litigation risks and leverage institutional familiarity (Papageorgiadis, Xu, & Alexiou, 2019). This preference for weaker IP environments is further evidenced by smartphone vendors deliberately operating in regions with limited IP protection to minimize litigation risks (Paik & Zhu, 2016). Further, broader institutional environments also play a significant role in shaping the relationship between IP protection and location choice. For instance, Albino-Pimentel, Dussauge, and El Nayal (2022) find that favorable diplomatic relations between home and host countries can offset the deterrent effects of weak IPR regimes, encouraging MNEs to invest in innovation-related activities. Similarly, Papageorgiadis, McDonald, Wang, and Konara (2020) highlight the importance of informal institutions in enhancing the effectiveness of formal IP laws in attracting FDI.

Related to location choice decisions, scholars have also examined how China's IP environment influences MNEs' entry mode. In China, MNEs often choose wholly owned subsidiaries over joint ventures to maintain control over proprietary technologies (Luo, 2001). Where international joint ventures are pursued, firms embed more detailed contractual governance to reduce risks (Luo, 2005). These findings are consistent with the observation by Oxley (1999) that firms adopt more hierarchical structures when operating in low-protection contexts, linking IP vulnerability with entry mode choices.

Second, firms strategically adapt their staffing strategies, particularly the deployment of home-country expatriates, in response to varying levels of IP protection. Drawing on a multinational context, Berry (2017) illustrates how expatriates bridge the gap between headquarters and

subsidiaries, combining strong corporate alignment with local familiarity to reduce IP risks. In the Chinese context, McGaughey, Liesch, and Poulson (2000) emphasize that trust and causal ambiguity help prevent inadvertent imitation by locally embedded staff. This protective role is further demonstrated by evidence from 435 Korean subsidiaries across 40 host countries, where well-positioned expatriates effectively safeguard knowledge flows by coordinating and monitoring technology transfers, thereby defending against unauthorized disclosure or misappropriation (Lee, 2025).

Finally, given the inherent complexities of the IP environment in China, many firms adopt integrated, multi-pronged non-IP strategies. Drawing on interviews with 13 foreign subsidiaries, Keupp, Beckenbauer, and Gassmann (2009, 2010) identify informal tactics such as restricting internal access to key technologies, cultivating trusted networks, and partnering with local authorities and the customs to prevent infringement. Firms also work to shape consumer perceptions by distinguishing their products from counterfeits. Qian (2014), in a study of 31 Chinese shoe companies and their counterfeiters from 1993 to 2004, finds that firms respond through quality upgrades, price increases, and brand monitoring. Beyond defensive measures, firms also engage in institutional shaping through lobbying and building coalitions with policymakers to advocate for stricter IP standards that align with their strategic interests (Brandl, Darendeli, & Mudambi, 2019). These strategies reflect a holistic approach that combines internal controls with external engagement to mitigate risk while pursuing market opportunities.

Firm-Level Consequences of Firms' IP Strategy

In the following sections, we review a growing body of literature that explores the firm-level consequences of IP strategies. Research reveals that IP strategies not only directly affect firm outcomes, such as financial and technological performance, but also influences other strategic activities, thereby shaping broader organizational consequences. Note that there exists significant overlap between the theoretical mechanisms driving IP strategy (S1–S2) and those underlying its consequences (S2–S6). After all, firms often adopt IP strategies in anticipation of the effects they will produce. Thus, in reviewing papers in this section, we focus on the empirical findings on the consequences of the IP strategy, with the understanding that the same logic of value appropriation and non-market purposes is already embedded in the antecedents of IP strategies.

In terms of financial performance, existing studies often measure the impact of IP strategies through market valuation. For example, Hsu, Hsu, and Zhao (2021) find that the combined use of patents and academic publications significantly enhances firm value, reflecting synergies between commercial and scientific outputs. Similarly, Xiao et al. (2024) show that both active and inactive trademarks contribute positively to firm value when aligned with core operations. International research reveals consistent findings. For instance, patent stock is positively associated with firm valuation (Bloom & Van Reenen, 2002).

Beyond financial metrics, IP strategies also affect technological performance. Yao, Li, Chen, and Yu (2024) find that leading Chinese ICT firms achieve higher technological returns by deploying SEPs and engaging in preemptive innovation. In a cross-border context, Huang and Li (2019) demonstrate that Chinese patents can act as credible signals in foreign markets, increasing the popularity of Chinese technologies in the US.

Additionally, IP strategies shape firm-level outcomes not only directly but also indirectly through several critical mechanisms. First, firms' IP can serve as collateral, easing firms' access to external financing by reducing information asymmetries and signaling asset quality (Amable, Chatelain, & Ralf, 2010). Second, IP assets enhance firms' bargaining power in mergers and acquisitions, acting as valuable intangible resources that strengthen negotiation positions (Grimpe & Hussinger, 2014). Third, strong IP portfolios amplify the impact of strategic investments, such as R&D, by signaling technological potential and improving valuation in IPO contexts (Heeley, Matusik, & Jain, 2007).

While most of these studies are grounded in international settings, these mechanisms are increasingly relevant in the Chinese context. For instance, the use of patents as loan collateral has expanded significantly in China in recent years (Liu, 2022).

Summary of Data Sources and Research Design

In organizing the literature into the framework presented in Figure 3, we also identified a comprehensive list of data sources used in these studies, as well as empirical measures and empirical designs based on these sources (see Table 3). Compiling these sources in a single table allows researchers to easily reference existing work and evaluate the relative advantages and limitations of each dataset.

Data Sources

Empirical studies on IP management in China predominantly rely on archival data related to IP application, licensing, and litigation. Research on patent applications has primarily drawn on data from the State Intellectual Property Office of China (SIPO), renamed the China National Intellectual Property Administration (CNIPA) in August 2018 (Ang et al., 2023; He et al., 2018; Kafouros et al., 2015). Since firm names in this database are in Chinese, they can be matched with other domestic firm-level databases (He et al., 2018). For studies examining cross-country activities, the EPO's PATSTAT database is one of the most used (de Rassenfosse, Raiteri, & Bekkers, 2023; Yu et al., 2022). Trademark data are usually obtained from CNIPA and the State Administration for Industry and Commerce (SAIC) before 2018. Earlier trademark data in China was compiled using the Chinese Trademark Gazette (Shangbiao Gongbao) (Alfaro, Ge, Chen, Hong, & Steinwender, 2024).

Although relatively few studies focus on patent licensing, those that do typically rely on data from CNIPA's Regulations on the Administration of Record Filing of Technology Licensing, which took effect on January 1, 2002. Under these regulations, patent licensing agreements must be registered with CNIPA within three months of the contract being signed by both the licensor and licensee (Shen, Coreynen, & Huang, 2022).

Studies that assess the effectiveness of IP assertion in China have employed data from multiple sources, such as PKULAW (pkulaw.com) (Zhang et al., 2022), China Judgements Online (CJO) (Bian, 2018), the China IP Litigation Analysis (CIELA) database (Love, Helmers, & Eberhardt, 2015), and the Intellectual Property Case Guidance Service Platform (Sun et al., 2023). Clarivate's Darts-IP Case Platform, which includes IP cases around the world (Beukel & Zhao, 2018), also has reasonable coverage of Chinese cases.

In addition, several surveys conducted by Chinese authorities provide valuable information on innovation and IP by Chinese companies. Kafouros, Wang, Piperopoulos, and Zhang (2015) obtained data on the R&D expenditures of high-tech companies from the Innovation-Oriented Firms Database (IOFD), managed by the Ministry of Science and Technology of China (MSTC), while Wang et al. (2020) used data about industrial companies from the Annual Census of Chinese Industrial Firms (ACCIF) compiled by the National Bureau of Statistics of China (NBS). All these firm-level data can be supplemented by CNIPA's annual Inventors Survey Database (ISDB), which offers a careful assessment on the commercial value of patented inventions (Huang, Huang, Shen, & Mao, 2021).

Empirical Designs

Data availability in IP research critically influences empirical measures, research methods, and sample selection, particularly in the context of China's rapidly changing IP environment.

In Table 4, we summarize the measures of IP protection strength, which can be categorized into three levels: city, province, and country. At the city level, IP protection is often measured using survey-based indices, such as those from the Chinese Academy of Social Sciences (CASS) (Fang, Lerner, & Wu, 2017). At the provincial level, common measures include the fraction of IP infringement cases

Table 3. Data sources for studying IP in China

Topic	*Data Source*	*Representative Studies*
Patent Application	The State Intellectual Property Office of China (SIPO): https://pss-system.cponline.cnipa.gov.cn/conventionalSearch	Ang, Jia, Yang, and Huang (2023)
		Cai, Sarpong, Tang, and Zhao (2020)
		de Rassenfosse, Raiteri, and Bekkers (2023)
		Genin, Tan, and Song (2022)
		He, Tong, Zhang, and He (2018)
		Hu, Zhang, and Zhao (2017)
		Huang, Geng, and Wang (2017)
		Huang and Li (2019)
		Sun, Lei, Wright, Cohen, and Liu (2021)
		Tong, Zhang, He, and Zhang (2018)
		Yang and Sonmez (2018)
	PATSTAT, EPO Worldwide Patent Statistical Database	de Rassenfosse, Raiteri, and Bekkers (2023)
		Liegsalz and Wagner (2013)
		Yu, Wu, Chen, and Lewin (2022)
Patent Licensing	The China National Intellectual Property Administration (CNIPA)	Shen, Coreynen, and Huang (2022)
Patent Litigation	PKULAW (pkulaw.com)	Zhang, Crupi, and Di Minin (2020)
		Zhang, Li, and Xu (2022)
	China Judgements Online	Bian (2018)
	China Judicial Case Database	Ang, Cheng, and Wu (2014)
	The China IP Litigation Analysis (CIELA) database	Love, Helmers, and Eberhardt (2015)
	The Intellectual Property Case Guidance Service Platform	Sun et al. (2023)
	Darts-IP by Clarivate	Beukel and Zhao (2018)
Trade Secrets	China Judgements Online	Wang (2023)
	PKULAW (pkulaw.com)	Wang (2023)
Survey Data	Survey by the Privately-Owned Enterprises Research Project Team in 1995, 1997, and 2000	Ang and Jia (2014)
	Innovation-Oriented Firms Database by the Ministry of Science and Technology of China (MSTC)	Kafouros, Wang, Piperopoulos, and Zhang (2015)
	Inventors Survey database (ISDB) by CNIPA	Huang, Huang, Shen, and Mao (2021)
	The Annual Census of Chinese Industrial Firms (ACCIF) conducted by the National Bureau of Statistics of China (NBS)	Wang, Kafouros, Yi, Hong, and Ganotakis (2020)

(*Continued*)

Table 3. (*Continued.*)

Topic	*Data Source*	*Representative Studies*
Trademark	China Trademark Office under CNIPA	Xiao et al. (2024)
	State Administration for Industry and Commerce (SAIC) of China	Wang (2023)
	The Chinese Trademark Gazette	Alfaro, Ge, Chen, Hong, and Steinwender (2024)

Table 4. Measures or proxies of IP protection

Level	*Measurement*	*Representative Studies*
City Level	Survey-based index from the Chinese Academy of Social Sciences (CASS), Urban Competitiveness Report	Fang, Lerner, and Wu (2017)
Province Level	Fraction of IP infringement cases won by plaintiffs (IP owners) in provincial courts. Number of articles advocating for IP protection published in the official newspaper of the provincial Communist Party.	Ang, Cheng, and Wu (2014)
	Ratio of accumulated closed IPR cases to the total number of legal IPR cases entertained in a specific region.	Kafouros, Wang, Piperopoulos, and Zhang (2015)
		Wang, Kafouros, Yi, Hong, and Ganotakis (2020)
	Marketization Index of China's Provinces: NERI Report	Xiao et al. (2024)
Country Level	Park's (2008) updated patent protection index (from the original Ginarte & Park, 1997 index).	Berry (2017)
		Albino-Pimentel, Dussauge, and El Nayal (2022)
		Papageorgiadis, McDonald, Wang, and Konara (2020)
		Schmiele (2013)
	The Intellectual Property Rights Index (IPRI), a composite index combining the Ginarte and Park (1997) index with the World Economic Forum's Global Competitiveness Index.	Paik and Zhu (2016)
	Heritage Foundation (2007)	Estrin, Meyer, and Pelletier (2018)
	A composite index that combines the Ginarte and Park's patent rights index (GP) with a country's score on Impartial Courts (IC) from the Economic Freedom of the World (EFW) report by the Fraser Institute.	Belderbos, Park, and Carree (2021)
	A composite index averaging the World Economic Forum's Intellectual Property Protection Index and the Heritage Foundation's Property Right Index	Lee (2025)

won by plaintiffs, the number of articles advocating for IP protection in mainstream newspapers, and the marketization index of Chinese provinces (Ang et al., 2014; Xiao et al., 2024). These city- and provincial-level measures are primarily used to examine the effects of regional variations in IP protection within China. In contrast, country-level measures – such as Park (2008)'s patent protection index, the Intellectual Property Rights Index (IPRI), and composite indices combining multiple international datasets – are the most widely used to assess how differences in national IP protection strength influence MNE strategies (e.g. Berry, 2017).

The availability of data not only influences what researchers study but also shapes how they study it. While legal databases such as PKULAW and China Judgements Online (CJO) have enabled empirical work on IP litigation in China, gaps in judicial transparency remain a persistent obstacle. As Wang (2023) points out, only a fraction of SPC's rulings are publicly accessible, raising concerns about selection bias. Likewise, data on patent licensing from CNIPA is limited to contracts registered within a three-month window, likely missing informal or unregistered transactions (Shen et al., 2022). These limitations often compel researchers to rely on instrumental variables or indirect proxies, weakening the strength of causal inference.

Finally, data constraints also narrow the scope and representativeness of research samples. Take the Innovation-Oriented Firms Database (IOFD), for instance – it concentrates on high-tech enterprises, offering limited visibility into the IP behaviors of traditional industries or small and medium-sized enterprises (Kafouros et al., 2015). Similarly, the Annual Census of Chinese Industrial Firms (ACCIF) excludes the service sector altogether (Wang et al., 2020). The result is a body of research that, while often rich in detail, may not fully capture the complexity and diversity of China's broader IP landscape.

Discussion

Two pairs of seemingly contradictory observations stand out when it comes to IP management in China. First, China is often portrayed as one of the worst IP offenders while claiming the largest portfolio of active patents and some of the busiest IP courts in the world. Second, IP protection in China has attracted extensive public attention and media coverage, but academic inquiry on this topic has been limited. This review seeks to clarify these contradictions by organizing IP-related literature across disciplines into a comprehensive framework and by comparing research on IP in China with broader studies based in developed-country contexts.

Based on the comparative analyses, we argue that the paradoxes seem to be driven by the multifaceted nature of IP and the complex institutional environment in China. While these features led to fragmentation in the literature, they also present promising avenues for future research.

First, IP as a legal right is related to, but distinct from, innovation. As in the examples of evergreening (Hemphill & Sampat, 2012), fence-building (Ziedonis, 2004), forum shopping (Sytch & Kim, 2021), propensity to patenting (Hou, Png, & Xiong, 2023), and complex power struggles in standard-setting organizations (Ranganathan, Ghosh, & Rosenkopf, 2018), the strategy literature has shown that firms often use IP as a strategic asset beyond the sphere of innovation. This reflects a core theoretical tension: innovation strategy views IP as a tool to incentivize and protect inventive activity, whereas IP strategy treats IP as a means of gaining competitive advantage, often irrespective of technological novelty. Firms skilled in IP strategy typically focus on extracting value from their existing IP portfolios, while the most innovative firms may rely on speed-to-market and operational agility, choosing not to patent technologies that are likely to become obsolete quickly.

This distinction is particularly relevant in China, where government subsidies and patent quotas encourage companies to amass large patent portfolios, even when these patents are not directly tied to innovation. In contrast, entrepreneurial firms in fast-moving sectors do not have the necessary resources to file for IP. This divergence underscores the importance of studying IP strategy separately from innovation strategy in the Chinese context, where the intersection of government policy and business practice amplifies these differences.

Second, value appropriation through IP is inherently contextual (James, Leiblein, & Lu, 2013), and IP strategies are intertwined with broader strategic choices. From a business strategy perspective, firms leverage IP not only to protect innovation but also to shape competitive dynamics – using it to deter rivals, enhance market reputation, and strengthen bargaining positions (Cohen et al., 2000). Firms frequently employ IP for offensive as well as defensive reasons (Somaya, 2012). For example, although Google initially disparaged the patent arms race (Regalado, 2013), it bought 1,030 IBM patents in 2011 in response to the lawsuit from Oracle and purchased Motorola Mobility in 2012,

primarily for Motorola's extensive patent portfolio, amid legal disputes with Apple and Microsoft. Many Chinese industries, such as electronics and automotives, have also entered the oligopolistic competition. Incorporating competition into the analysis of IP strategies can shed new light on the optimal IP portfolios and the optimal level of enforcement for sustaining long-term firm performance.

From the corporate strategy perspective, firms' internal structures, such as the assignment of economic (Magelssen, 2020) and legal rights (Arora, Belenzon, & Rios, 2014) to subsidiaries, have significant effects on innovation and knowledge flow. Nonetheless, our review suggests that China-based IP research often overlooks these intra-organizational dynamics, despite the fact that many of the samples comprise multi-unit multi-locational firms. Future research could benefit from a closer look of within-firm coordination, particularly how IP professionals – both internal IP managers and external legal counsels – collaborate with R&D teams and senior executives.

Third, IP strategy is increasingly shaped by global dynamics. Over the past two decades, American inventors have filed non-US patents at a rate 2.5 times faster than their domestic filings (Santacreu & Labelle, 2021), while foreign inventors now account for more than half of all patents granted by the USPTO.[1] The high-profile patent war between Apple and Samsung, which spanned nine countries, underscores the cross-border nature of IP strategy (Beukel & Zhao, 2018; Elmer & Gramenopoulos, 2019; Paik & Zhu, 2016). More recently, the push toward de-coupling and deglobalization – coupled with industrial policies promoting indigenous innovation – has added layers of complexity to MNEs' IP strategies. Situated at the center of the US-China trade tension, Chinese companies are forced to accelerate innovation and reduce dependence on foreign technologies (Han et al., 2024; Huang et al., 2024). At the risk of governments using IP litigation and standard-setting to confront foreign rivals, MNEs must navigate growing geopolitical tensions and balance pressures from both home and host countries (Park, Santangelo, & Zhao, 2025).

As Chinese companies expand internationally and engage in global competition, they must navigate a complex and unfamiliar institutional landscape when crafting their IP strategies. As newcomers to the block, they often face additional challenges in having their IP accepted by the incumbents (Schott & Schaefer, 2023). Nevertheless, many are already adept at arbitraging across diverse legal regimes and policy frameworks, as illustrated by Lenovo's preemptive lawsuit against ZTE in a London court. These dynamics point to fertile ground for future research: how the broader institutional environment shapes the IP strategies of Chinese firms, and how their increasingly proactive global moves, in turn, reshape the relationship between China's IP system and those of other nations.

Finally, the rapid evolution of both IP institutions (Zhao, 2020) and innovation capabilities in China (Wei, Xie, & Zhang, 2017) underscores the need for a dynamic perspective on IP strategies. On the one hand, there is tremendous inertia in the institutional environment and in people's perception of firms from certain institutional backgrounds. On the other hand, Chinese firms are joining the global frontier in innovation and new product development. These shifts are unfolding amid two powerful external forces: the rise of advanced artificial intelligence, which challenges conventional patentability standards across jurisdictions, and escalating geopolitical tensions, which test the adequacy of global IP frameworks such as the WTO's TRIPS agreement. In light of these developments, revisiting earlier studies grounded in the traditional innovator–imitator or Global North–South paradigm (Qian, 2008; Zhao, 2006) offers a valuable opportunity to generate fresh insights into the emerging tensions and realignments in today's IP landscape.

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Note

1. https://ncses.nsf.gov/pubs/nsb20221

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Appendix A: Milestones of the evolution of Chinese IP institution: From 1978 to present

Year	International Treaties and Organizations	Administrative and Judicial Institutions	Major Legal Revisions	Policy documents	Representative studies based on the events
1978	Adopted 'Open-door' policy	Trademark Office established	—	—	
1980	Joined the World Intellectual Property Organization (WIPO)	State Patent Office established	—	—	
1982	—	—	First Trademark Law enacted	—	
1984	—	—	First Patent Law enacted	—	
1985	Joined Paris Convention for the Protection of Industrial Property	National Copyright Administration established	—	—	
1989	Joined Madrid Agreement Concerning International Registration of Marks (Protection of Trademark)	—	—	—	
1990	—	—	First Copyright Law enacted	—	
1992	Signed China-US Memorandum of Understanding on IPR Protection (MOU); Joined Berne Convention (Protection of Literary and Artistic Works); Joined Universal Copyright Convention	—	Patent Law revised	—	

(*Continued*)

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1993	Joined Geneva Convention (Protection of Phonogram Producers)	IP tribunals established in Intermediate and Higher People's Courts	Trademark Law revised; Anti-Unfair Competition Law (AUCL) enacted	—	
1994	Joined Patent Cooperation Treaty (PCT); Joined Trademark Law Treaty	—	—	—	
1995	Joined Protocol Relating to Madrid Agreement	—	—	—	
2000	—	—	Patent Law revised	—	Tong, Zhang, He, and Zhang (2018)
2001	Joined WTO and TRIPS Agreement	—	Trademark Law revised; Copyright Law revised	—	Huang, Geng, and Wang (2017)
2006	—	—	—	State Council issued "Guidelines on National Medium and Long-term Program for Science and Technology Development (2006-2020)"	Jia, Huang, and Zhang (2019) Ang, Jia, Yang, and Huang (2023)
2008	—	—	Patent Law revised	State Council issued "Outline of the National Intellectual Property Strategy"	
2010	—	—	Copyright Law revised	—	
2013	—	—	Trademark Law revised	—	
2014	—	Specialized IP Courts established in Beijing, Shanghai, and Guangzhou	—	—	Zhang, Li, and Xu (2022)

(*Continued*)

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2017	—	IP Tribunals established in 22 cities	Anti-Unfair Competition Law (AUCL) revised	—
2018	—	China National Intellectual Property Administration (CNIPA) established	—	—
2019	—	IP Tribunal of Supreme People's Court officially inaugurated	Trademark Law revised; Anti-Unfair Competition Law (AUCL) revised	State Council issued "Opinions on Strengthening the Protection of Intellectual Property Rights"
2020	—	IP Court established in Hainan Free Trade Port	Patent Law revised; Copyright Law revised	the Supreme People's Court (SPC) issued the Provisions on Several Issues Concerning the Application of Laws in the Trial of Civil Cases Involving Trade Secret Infringement (the Trade Secret Provisions).
2021	—	—	First Personal Information Protection Law enacted	State Council issued "Outline for Building a Country Strong in Intellectual Property Rights (2021–2035)"
2023	Joined the Apostille Convention	—	—	—

Source: Huang (2017); Hong, Edler, and Massini (2022); State Council of the People's Republic of China. (2021). Outline for Building a Country Strong in Intellectual Property Rights (2021–2035). http://www.gov.cn/zhengce/2021-09/22/content_5638714.html

Appendix B: IP and Competition for Global Influence

The U.S.–China trade war, which escalated significantly in 2018, placed IP disputes at the center of international economic diplomacy. Citing long-standing concerns over China's IP practices, the United States initiated a Section 301 investigation in August 2017, which led to tariffs on Chinese goods starting in 2018 and an explicit connection between trade restrictions and allegations of forced technology transfer and IP misappropriation by China. As tensions escalated, the U.S. government placed ZTE on its Entity List in 2016 (with harsher sanctions in April 2018) and later blacklisted Huawei in May 2019, effectively cutting off their access to critical U.S. components and IP-dependent technologies. In response, China announced the creation of an 'Unreliable Entity List' in May 2019 (formally implementing it in September 2020), targeting foreign firms that it deemed to threaten China's national interests, and later enacted its Export Control Law in October 2020 (effective December 2020), restricting the transfer of sensitive technologies.

IP systems are national institutions, but they do not exist in isolation (Beukel & Zhao, 2018). Despite these signs of decoupling, China's IP institutions are increasingly integrated into the global IP system. China's National Intellectual Property Administration (CNIPA) is a member of IP5, a forum of the five largest intellectual property offices worldwide. Other members include the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), and the United States Patent and Trademark Office (USPTO). Established to bolster the effectiveness of the patent examination process on a global scale, the IP5 offices' contributions make up more than 80% of the world's patent activities, highlighting their considerable influence and extensive reach. CNIPA is also a participant in the Patent Prosecution Highway (PPH), which facilitates patent prosecution by fostering information exchange among participating patent offices, mitigating redundant efforts in the examination of identical patent applications in multiple countries.

China has also increased its participation in international standardization efforts. Based on 3GPP (Third Generation Partnership Project) standardization activities between 2000-2019, China has dramatically increased its participation in international ICT standardization with over 230% growth in technical contributions, although the acceptance rate of these contributions remains significantly lower than their counterparts from industrialized countries (Schott & Schaefer, 2023).

Another essential aspect of China's growing influence in standardization efforts is its increasing participation in international patent pools, which are designed to facilitate SEPs (Standard-Essential Patents) licensing and reduce litigation risks. For example, in 2022, Huawei became a founding member of the Sisvel Wi-Fi 6 patent pool, contributing its SEPs for Wi-Fi 6 technology to a global licensing framework (Huawei, 2022). Similarly, in 2023, Huawei and ZTE joined Avanci's connected vehicle patent pool, which streamlines the licensing of 4G and 5G SEPs for automotive manufacturers. In 2024, Vivo, alongside Xiaomi and Oppo, entered Via Licensing's Advanced Audio Coding (AAC) patent pool, further integratingChinese firms into global IP-sharing mechanisms (Via Licensing, 2024). This shift toward collaborative licensing models reflects a broader transformation in China's IP strategy, moving from defensive patenting and litigation-based approaches to structured participation in international licensing ecosystems.

While embracing these collaborative mechanisms, China has also become increasingly assertive in IP litigation, particularly regarding SEPs. SEPs are patents that cannot be circumvented while adopting a standard. To avoid patent holdups and royalty stacking, SEP holders are obliged to license their patents to users on fair, reasonable, and non-discriminatory (FRAND) terms. The ambiguity surrounding the FRAND terms frequently sparks legal disputes among leading technology firms within and across sectors. The importance of venue for SEP litigation has gained prominence as courts issue injunctions to bolster their jurisdictional advantages in the global competition (Contreras et al., 2017). In recent years, Chinese courts have made proactive efforts in handling complex, cross-border IP disputes. For example, since 2020, China has issued several global anti-suit injunctions (ASI) with an aim to prevent foreign entities from seeking injunction or determination of global licensing rates for SEPs in non-China courts. In the case of Huawei v. Conversant, the Supreme People's Court issued an ASI to forbid Conversant from requesting the enforcement of the German court's first-instance injunction. Similar cases include Xiaomi v. Interdigital (Wuhan), ZTE v. Conversant (Shenzhen), OPPO v. Sharp (Shenzhen), and Oppo v. Nokia (Chongqing). While elevating the global prominence of Chinese courts, some decisions also triggered concerns among their overseas counterparts, including a WTO filing by the EU.

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