

**A Tale of Two IPs in China:  
Linking Intellectual Property and Industrial Policy Through Standard Essential Patents**

**Philip C. Rogers  
University of California, Berkeley  
Travers Department of Political Science**

Balancing between competition policy and intellectual property is especially salient in fields for which interoperability is critical and proprietary technology may become foundational. The licensing of standard essential patents (SEPs) is likewise critical to the digital economy driving contemporary society, as the parties who control the standards shape the future. Chinese industrial policy emphasizes global leadership in these very fields, which presents the opportunity for analysis of the frameworks managing the nexus of anti-monopoly concerns and innovation incentives in a globally influential economy managed by an assertive but largely market-oriented state. Doing so will enhance our theorization of the comparative institutional advantages and disadvantages emerging from the specific sources of law and sorts of state actors governing the market of advanced technologies. This article therefore proceeds from a public policy perspective, asking what treatment of and framework for SEPs in China optimally balances a set of objectives that can compete with one another. After establishing those objectives by considering key components of innovation policy articulated by the state and examining the relevant legal and regulatory structures currently in place, it surveys empirical developments pertaining to the adjudication of SEP cases in Chinese courts. Against this backdrop, the article concludes that China's SEP framework reasonably navigates its various industrial policy goals, though being even more explicit about the considerations for FRAND licensing and China's relationships with international standards would help further the resulting need to balance international technological independence and integration while developing enterprises large and small.

## **Introduction: Bridging Intellectual Property and Industrial Policy With Competition Law**

Chinese laws and regulations are often prefaced with the phrase “to promote the development of the socialist market economy”. Viewing this invocation merely as an ideological trope understates the paradoxical dynamics at its core. The adjectives reflect political emphasis on the value of large State-Owned Enterprises operating alongside private entrepreneurialism. The nouns and verbs evoke five-year plans, performance metrics, and priority sectors emanating from various state organs to channel capitalist forces. And the positioning of the clause affirms the role of legal frameworks as industrial policy tools. Overall, the terminology and its placement assert a harmonious dance between ostensibly antithetical forces that drives economic progress.

A similarly intricate dance takes place between intellectual property rights on the one hand and competition law on the other. In particular, patents are at their core a monopoly over an invention or process granted to incentivize technological innovation. But competition law’s core goal is to prevent abuses of market dominance from inhibiting the efficient use of resources necessary for improvements to production and consumer well-being. The balancing act for fields in which interoperability is critical and proprietary technology may become foundational is the licensing of so-called Standard Essential Patents (SEPs) on terms that are fair, reasonable, and non-discriminatory (FRAND). Determining what constitutes an SEP and FRAND terms is especially salient in the digital economy driving contemporary society, as the parties who control the standards shape the future.

And it is precisely the new age technologies of the digital economy that China’s industrial planners have set their sights upon. With well-publicized aspirations of global leadership in aerospace, robotics, communication networks, and artificial intelligence, Chinese policymakers are enthusiastically pushing into realms in which an intricate balancing act of industrial policy, market regulation, and intellectual property rights will significantly impact both the Middle Kingdom and the world at large. This process of straddling political motivations, economic targets, and business realities will help write the next chapter in our theorization of the Chinese state and the function of legal frameworks. But as an essentially practical matter, it is ripe for pragmatic and empirically driven analysis.

This article therefore proceeds from a public policy perspective, asking what treatment of and framework for SEPs in China optimally balances a set of objectives that can compete with one another. The first section establishes those objectives by considering key components of innovation policy articulated by the state. The second section examines the relevant legal and regulatory structures in place relevant to SEPs, and the third section surveys empirical developments pertaining to the adjudication of SEP cases in Chinese courts. Against this backdrop, the fourth section concludes with an assessment of which objectives current practice is well-suited for and what adjustments may be made to more effectively balance them with other goals. China’s SEP framework reasonably navigates its various industrial policy goals, though being even more explicit about the considerations for FRAND licensing and China’s relationships with international standards would help further the resulting need to balance international technological independence and integration while developing enterprises large and small.

### **I. State-Led Innovation: Policy Objectives and Their Implications**

Industrial policy as invoked above is a concept distinct from the much broader idea of state intervention in the economy. As Vogel points out, markets and states are co-constituent because

institutional frameworks are necessary for market operations and as such require the sort of deliberate, pragmatic design akin to exercising statecraft.<sup>1</sup> Measures like tax cuts or subsidies are no doubt economic policy, but the idea of industrial policy used in this paper stresses both intervention and a comprehensive, strategic effort to promote specific sectors of the economy. In this regard, it is reminiscent of the approach associated with Japan and South Korea as so-called “developmental states” (a term which Woo-Cummings explains as “shorthand for the seamless web of political, bureaucratic, and moneyed influences that structures economic life in capitalist Northeast Asia”<sup>2</sup>) or “coordinated market economies” (the terminology that Hall and Soskice use to describe economies in which “firms depend more heavily on non-market relationships to coordinate their endeavors with other actors and to construct their core competencies”).<sup>3</sup>

Naughton and Tsai argue that the Chinese economy reflects “state capitalism” in that it is characterized by direct control of strategic sectors, party control over personnel, a market foundation for large swaths of the economy, extensive industrial policy formulation on the part of the government, and continued state control over finance.<sup>4</sup> It is in such a context that state-directed efforts and plans for innovation are playing out. While a complete survey of the industrial policy initiatives involved goes well beyond the scope of this article, the central government has articulated objectives driving them through two key initiatives in particular: The National Medium- and Long-Term Program for Science and Technology Development 2006-2020 and Made in China 2025. Understanding the aspirations adumbrated in these initiatives is a necessary precondition for assessing the legal measures and regulatory frameworks intended to serve them.

For starters, China’s Ministry of Science and Technology emphasizes multiple facets of indigenous innovation (*zizhu chuangxin*, 自主创新) through the promulgation of the National Medium- and Long-Term Program for Science and Technology Development 2006-2020 (hereinafter “MLP”). While accounts of China’s economic rise typically emphasize the acquisition of foreign technology and know-how,<sup>5</sup> Chinese leaders are sensitive to the possibility of over-reliance on such transfers. The issue is particularly germane to the issue of SEPs, as the need for Chinese companies, be they plucky start-ups or more established titans, to continually pay royalties to leading foreign SEP holders grows the gap between China’s payments for and receipts from the use of intellectual property.<sup>6</sup> More, generally, however, the MLP is explicit about moving well beyond quips about R&D in China standing for “receive and duplicate” instead of “research and development”. As Section II, Article 2 states:

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<sup>1</sup> Steven K. Vogel, *Marketcraft: How Governments Make Markets Work* (New York: Oxford University Press, 2016).

<sup>2</sup> Meredith Woo-Cummings, “Introduction: Chalmers Johnson and the Politics of Nationalism and Development,” in *The Developmental State*, ed. Meredith Woo-Cummings (Ithaca: Cornell University Press, 1999), 1.

<sup>3</sup> Peter A. Hall and David Soskice, “An Introduction to Varieties of Capitalism,” in *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*, ed. Peter A. Hall and David Soskice (New York: Oxford University Press, 2001), 8.

<sup>4</sup> Barry Naughton and Kellee S. Tsai, *State Capitalism, Institutional Adaptation, and the Chinese Miracle* (New York, NY: Cambridge University Press, 2015).

<sup>5</sup> Perhaps the most high-profile application of this perspective is President Donald Trump’s assertions supporting the US trade war with and export controls on China.

<sup>6</sup> Dieter Ernst, “China’s Standard-Essential Patents Challenge: From Latecomer to (Almost) Equal Player?” Centre for International Governance Innovation Special Report (2017), 22.

By 2020, the nation’s gross expenditures on R&D...are expected to rise to 2.5% or above of the gross domestic product...with the rate of [science and technology] contribution to the economy reaching 60% or above, and dependence on imported technology reduced to 30% or below, and the annual invention patents granted to Chinese national and the international citations of scientific papers moving into the top five countries.<sup>7</sup>

Indeed, the MLP calls for science and technology policies to play a “guiding role” in creating a “unified, open, competitive, and orderly environment for the market economy” such that “enterprises, particularly large enterprises, are induced into increasing their R&D spending and establishing their own R&D bodies.”<sup>8</sup> It likewise describes a “national innovation system” that is “a government-led public system which gives full play to the basic role of the market in resource allocation while letting various innovation players forge close links and interact with one another.”<sup>9</sup>

But a particularly noteworthy feature of the MLP’s vision for an innovation landscape firmly rooted in domestic enterprises is its treatment of technology standards. Specifically, Section VIII, Article 4 asserts:

The development of technology standards should be made an important objective of national [science and technology] programs. Government agencies concerned and industrial associations shall strengthen guidance and coordination for the development of major technology standards, which are to be adopted as a priority... Take an active part in international efforts for standard development, and strive to make our country’s technology standards international standards.

It will be worth watching what updates are made to the MLP when the version for 2021-2035 are promulgated; on April 15, 2019 the Ministry of Science and Technology’s Department of Social Development and Scientific Technology held a kick-off research meeting for the 2021-2035 MLP with representatives from 19 national technological management agencies and over 240 individuals.<sup>10</sup> Presumably that meeting and the updated initiative it is working toward will complement the goals asserted in the other key declaration on industrial innovation: The State Council’s 2015 Notice on Printing and Distributing “China Manufacturing 2025”, more commonly known as Made in China 2025.<sup>11</sup>

Made in China 2025 has garnered considerable attention for the sorts of technologies it emphasizes. Among the Guiding Thoughts adumbrated in Section 2, Article 1 is innovation-

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<sup>7</sup> Quotations from the MLP in this paper come from the English translation available at <[https://www.itu.int/en/ITU-D/Cybersecurity/Documents/National\\_Strategies\\_Repository/China\\_2006.pdf](https://www.itu.int/en/ITU-D/Cybersecurity/Documents/National_Strategies_Repository/China_2006.pdf)>

<sup>8</sup> Section VII, Article 1.

<sup>9</sup> Section VII, Article 4.

<sup>10</sup> Ministry of Science and Technology of the People’s Republic of China, “2021-2035年国家中长期科技发展规划战略研究社会发展板块启动会在北京召开 [Opening Research Meeting on Social Development for the 2021-2035 National Medium- and Long-Term Plan for Technological Development Held in Beijing], April 15, 2019, <[http://www.most.gov.cn/kjbgz/201904/t20190418\\_146116.htm](http://www.most.gov.cn/kjbgz/201904/t20190418_146116.htm)>

<sup>11</sup> Technically the actually plan itself was drafted by the Ministry of Industry and Information Technology, but this article refers to Made in China 2025 as presented in the State Council’s articulation of it. Doing so technically cites a higher level of the bureaucracy, as the State Council represents China’s cabinet and the Ministry of Industry and Information Technology a ministerial agency under it.

driven development for which it is “imperative to...make breakthroughs in a batch of key generic technologies in major fields” and “promote the digital, Internet-based and intelligent development of manufacturing industry”.<sup>12</sup> Section 3, Article 6 subsequently sheds more light on what this language means and singles out, inter alia, 5G technology, operating systems and software, robotics, and aerospace equipment.

But the objectives articulated for such an emphasis are equally noteworthy in their assertions regarding subjects like intellectual property and technological standards. All but assuring intellectual property shall continue to be a hot topic in China, Section 3, Article 1 announces:

The use of intellectual property rights shall be strengthened. It is imperative to strengthen the reserves of the intellectual property rights to key and core technologies in key fields and build the industrialization-oriented patent portfolios and strategic layout. Enterprises shall be encouraged and supported to use intellectual property rights to participate in market competition, a batch of advantageous enterprises with comprehensive strength in intellectual property rights shall be fostered, the formation of alliances in intellectual property rights shall be supported and market subjects shall be propelled to use intellectual property rights in a collaborative manner.

In the same section, Made in China 2025 likewise calls for strengthening technological standards, asserting the importance of “bring[ing] into play the important role of enterprise in the formation of standards” and “support[ing] the formation of alliance for enhancement of standards in major fields.” It does not take too much reading between the lines to see a vision for Chinese firms as holders not only of intellectual property but foundational intellectual property to boot.

Yet this vision continues to embrace—at least rhetorically—integration with the global economy and balance among a range of enterprise types. Specifically, Section 3, Article 7 calls for promoting the coordinated development of large, medium, and small sized enterprises while fostering a batch of enterprise groups with strong core competencies. Section 3, Article 9 subsequently calls for the enhanced capabilities for cross-border business operations and increased international competitiveness, calling it imperative to “support the development of a batch of multinational companies and accelerate the improvement of core competitiveness through utilization of global resources.”

In several key respects, then, Made in China 2025 amplifies themes from the MLP. To be sure, the exegesis in this section is far from complete and purposefully highlights objectives that relate conceptually to the issue of SEPs. However, it does point to some industrial policy goals that, while maybe not entirely contradictory with one another, do not always pull in the same direction. First, one major objective is for China to become a technological power that does not rely on foreign technology. At the same time, however, integration and competitiveness in the global economy remains a paramount objective. Similarly, the MLP and Made in China 2025 both point to the need for small and medium enterprises to develop alongside large ones, but it does not take much reading between the lines to recognize a value in large national champions that compete domestically and internationally. The major implication of such objectives is therefore a balancing act between priorities in which SEPs can play a key part. Understanding the extent to which they may effectively straddle the dynamic tension emerging from multiple objectives is a question both of institutional design and practice.

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<sup>12</sup> Quotations from Made in China 2025 are taken from the English translation provided by Westlaw China.

## **II. Institutional Frameworks: Crafting an SEP Regime for Industrial Policy Goals?**

Foreign observers of China tend to use the phrase “rule by law” rather than “rule of law” when assessing the country’s approach to legal development.<sup>13</sup> While the law may very reasonably be thought of as one instrument for policy implementation in any jurisdiction, such a characterization speaks to the particular salience of law’s use as a tool for realizing state goals in China, particularly in the modern context prioritizing economic development and social harmony. What constitutes or is meant by the term “law” in China is an entire subject in and of itself; terms like “law”, “rule”, “regulation” and “administrative measure” refer to specific (if often confusing) distinctions that affect the institutional operationalization of political first principles. While a complete explanation of this underlying schema is not essential to the analysis here,<sup>14</sup> attentiveness to that schema better facilitates the evaluation of how SEPs advance the broader goals discussed in the previous section by illuminating which pieces of the puzzle can or should be addressed.

In terms of hierarchy, “laws” (*falü*, 法律)- the legislation passed by the National People’s Congress or its Standing Committee- are surpassed only by the constitution.<sup>15</sup> As SEPs operate at the intersection of intellectual property and market concentration, the two most conceptually germane laws are the Patent Law and the Anti-Monopoly Law. The Patent Law as currently written devotes Chapter 6 to compulsory licenses (*qiangzhi xuke*, 强制许可) for the exploitation of a patent, but proposed amendments still under consideration would change such terminology to “special license” (*tebie xuke*, 特别许可).<sup>16</sup> This modification, while seemingly semantic, could actually impact the way that SEPs are construed; rather than merely stating the compulsory nature of licensing in certain circumstances, the idea of a special license could go as far to imply that an SEP license should take into account the special characteristics (*tese*, 特色) of the licensee involved. The proposed amendments would also create the notion of an open license (*kaifang xuke*, 开放许可) for patentees who declare in writing their willingness to license any party to implement its patent along with the payment methods and standards of royalties for practicing it. The conclusion shall further address the desirability of such amendments. As written, though, Chapter 6 of the Patent Law is noteworthy in that Article 48, Paragraph 2 requires licensing when the exercise of a patent is determined to be a monopoly whose negative impact on competition needs to be eliminated or reduced. While not explicitly evoking the idea of an SEP, this provision of the Patent Law mirrors the rationale behind FRAND requirements for SEPs.

Unlike the Patent Law, the basis for SEPs in the Anti-Monopoly Law are even more inferential. In fact, the only article in the Anti-Monopoly Law that broaches the subject of intellectual property is Article 55, which states:

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<sup>13</sup> See Stanley Lubman’s *Bird in a Cage: Legal Reform in China After Mao* (Stanford University Press, 2000), Randall Peerenboom’s *China’s Long March to the Rule of Law* (Cambridge University Press, 2002), and (with regards to intellectual property law in particular) William Alford’s *To Steal a Book is an Elegant Offense: Intellectual Property Law in Chinese Civilization* (Stanford University Press, 1995).

<sup>14</sup> See Mark Cohen’s “What is Law in China?” available through correspondence with him (mark.cohen@law.berkeley.edu).

<sup>15</sup> *Ibid.*

<sup>16</sup> The proposed revisions (in Chinese) can be viewed at [http://scjg.sx.gov.cn/art/2019/2/22/art\\_1628905\\_30447030.html](http://scjg.sx.gov.cn/art/2019/2/22/art_1628905_30447030.html)

This law is not applicable to undertakings who exercise their intellectual property rights in accordance with the laws and administrative regulations on intellectual property rights; however, this Law shall be applicable to the undertakings who eliminate or restrict market competition by abusing their intellectual property rights.<sup>17</sup>

In the case of SEPs in particular, one could argue that the Anti-Monopoly Law defers entirely to the Patent Law insofar as the latter contains the provision cited above on compulsory licensing to correct adverse effects on market competition. But insofar as the Anti-Monopoly Law emphasizes the abuse (*lanyong*, 滥用) of intellectual property rights to eliminate or restrict market competition, it still speaks to the very situations in which SEPs could emerge. In any event, neither the Anti-Monopoly Law nor the Patent Law provide explicitly for SEPs and their handling, though they do appear to provide the conceptual latitude for SEPs.

Such latitude, however, is complicated somewhat by the Standardization Law. Globally (and particularly in jurisdictions like the United States and Europe), the standards that underpin SEPs are set by voluntary standard-setting organizations consisting of private commercial actors; examples include the European Committee for Standardization, the American National Standards Institute, and the International Electrotechnical Institution. However, the institutional design for standard-setting in China reflect a desire to ensure that standard-setting decisions ultimately rest with the state.<sup>18</sup> Article 2 asserts that standards include national standards (*guojia biao zhun*, 国家标准), industrial standards (*hangye biao zhun*, 行业标准), local standards (*difang biao zhun*, 地方标准), group standards (*tuanti biao zhun*, 团体标准), and enterprise standards (*qiye biao zhun*, 企业标准); while national standards may be classified as either compulsory (*qiangzhixing* 强制性) or recommended (*tuijianxing*, 推荐性), industrial and local standards are merely recommended standards. Even so, industrial standards are to be formulated by the relevant competent administrative agencies of China's State Council (i.e. China's cabinet) under Article 12, and Article 18 specifies that the formulation of group standards- those adopted inter alia by societies, associations, and industrial technology alliances- is to be guided, regulated, and supervised by the State Council.<sup>19</sup> And lest China be left out of globalization, Article 8 declares that the state actively promotes participation in international standardization activities and encourages participation therein by enterprises, social groups, and scientific research institutions.

Critically, though, the Standardization Law explicitly links standardization to the Anti-Monopoly Law. Article 39 declares that "Whoever...takes advantage of standards to commit the act of excluding or restricting market competition shall be dealt with in accordance with the Anti-Monopoly Law of China as well as other laws and administrative regulations."<sup>20</sup> This invocation conceivably links the Patent Law, Anti-Monopoly Law, and Standardization Law in a

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<sup>17</sup> Translation by Westlaw China.

<sup>18</sup> D. Daniel Sokol and Wentong Zheng, "FRAND (and Industrial Policy) in China," in *The Cambridge Handbook of Technical Standardization Law: Competition, Antitrust, and Patents*, ed. Jorge L. Contreras (New York: Cambridge University Press, 2018), 311.

<sup>19</sup> Local standards are formulated by competent administrative authorities at the provincial and municipal level but reported to the equivalent relevant agency at the national level under Article 13. As for enterprises, Article 19 merely states that they may formulate enterprise standards independently or jointly with other enterprises as needed.

<sup>20</sup> Translation by Westlaw China.

way that sets the stage for an assertive state to carefully and even purposefully direct the operation of SEPs. It bears emphasizing, however, that SEPS are not an explicit feature of relevant foundational law. Instead, the nuts and bolts are left to legal instruments a few pegs below laws on the hierarchy: administrative provisions.

The State Council itself issues administrative regulations (*xingzheng fagui*, 行政法规) under laws, but the various ministries under the State Council likewise issues administrative provisions or measures of its own (*guiding* or *banfa*, 规定/办法).<sup>21</sup> In the case of SEPs, the administrative provisions promulgated by two such ministries are especially relevant. First, the State Administration of Industry and Commerce- now under the auspice of the State Administration for Market Regulation established in 2018- issued in 2015 its Provisions on Prohibiting the Abuse of Intellectual Property Rights to Exclude and Restrain Competition (关于禁止滥用知识产权排除、限制竞争行为的规定). Article 13 explicitly defines SEPs (*biaozhun biyao zhuanli*, 标准必要专利) as “patents that are indispensable for the implementation of relevant standards”.<sup>22</sup> The same article likewise prohibits action that “violates fair, reasonable and non-discriminatory principles, and refuses to license [standard essential] patents, engages in tying sales of products, imposes other unreasonable conditions during transactions, or commits other acts that exclude or restrain competition” in asserting that business operators with a dominant market position shall not exclude or restrain competition during the formulation/implementation of standards.

This language amplifies similar prescriptions from China’s Standardization Administration in its 2013 Interim Administrative Provisions for Patent-Related National Standards (国家标准涉及专利的管理规定 (暂行) ). Article 9 provides that, when a national standard involves a patent, the patent holder must declare that it agrees to license the patent “free of charge”; that it agrees to license the patent on a basis that is “fair, reasonable, and non-discriminatory”; or that it does not agree to either royalty-free or fair, reasonable, and non-discriminatory licensing.<sup>23</sup> Article 10 subsequently provides that “national standards other than mandatory national standards shall not contain clauses on patents” if one of the two licensing terms in the previous article are not agreed to. However, the provisions are quick to point out in Article 14 that “Mandatory national standards do not generally involve patents”; when they do, issues concerning licensing and royalties are to be addressed through negotiation between the users of the standards and the patentees, per Article 17.

Collectively, then, these two administrative provisions contain the basis formally establishing SEPs as a feature of the market landscape and likewise explicitly direct their licensing on FRAND terms. It may not be surprising that details of this nature are left to administrative promulgations rather than ascending to the foreground of legislative instruments. Read together with the Patent Law, the Anti-Monopoly Law, and the Standardization Law, these declarations help sketch an institutional framework that is somewhat leery of patents becoming embedded in national standards. On a paper, at least, such circumspection may be a plus for more balanced development between small and medium enterprises and large enterprises discussed in the previous section. There are also gestures toward vigorous participation in the internationalization of standards under direction of the state alongside consistent emphasis on China’s

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<sup>21</sup> Supra Note 14.

<sup>22</sup> Translation by Westlaw China.

<sup>23</sup> Translations from 2013 the Interim Administrative Provisions for Patent-Related National Standards in this paragraph come from Westlaw China.

bureaucratically directed national standards. On paper, this is very much in line with the aspiration to strike a balance between integration with but decreased reliance on technology from abroad. It is, however, a bit unclear precisely how the sorts of standards declared by international standard setting organizations- which major transnational companies tend to gravitate to- fit into the puzzle. Moreover, while the administrative provisions affirm the importance of FRAND and even royalty-free licensing, what exactly constitutes FRAND appears to be left to case-by-case negotiations between the specific parties involved. Critically, then, disputes over issues at the heart of balancing intellectual property rights and market competition through SEPs is left largely to the judiciary. An empirical survey of just how those disputes are playing out is thus a sine qua non for evaluating SEPs in the context of China's industrial policy goals.

### **III. Empirics: Engaging with SEPs and Determining FRAND in the Chinese Judiciary**

China's judiciary continues to be both a source of scholarly fascination and legal development. While this article is not focused on frequently emphasized issues like professionalization and political autonomy<sup>24</sup> per se, the considerable role left for China's judicial branch in navigating SEP issues may definitely contribute to those discussions at a higher level of abstraction. The main concern here is considering how the judiciary's interaction with SEPs in practice brings the institutional design behind them to life in a way that may or may not dovetail with overarching policy concerns.

A relative boon for researchers has been the increased publication of Chinese court cases in recent years, which can facilitate more data-driven discussions of how the law is applied with Chinese characteristics. With the caveat that there is still a high degree of missing data which could include some of the most revealing information of all, bringing what we can observe into the discussion can still illuminate the discussion considerably.<sup>25</sup> In that vein, this article makes use of IP House (知产宝), a legal database based in China that collects cases pertaining to all aspects of intellectual property law from its users, many of whom are among China's leading law firms.<sup>26</sup>

A simple search of court decisions on IP House using only the term “标准必要专利” (“standard essential patents”) returns 77 judicial decisions spanning 2013 to 2017.<sup>27</sup> It should be emphasized that these are not 77 distinct disputes, as several of the search results reflect a case heard both at the court of first instance and subsequently on appeal. Specifically, 28 of the entries represent first instance trials (*yishen*, 一审), 48 entries represent second instance trials (*ersheng*, 二审), and 8 entries were cases heard by the Supreme People's Court.<sup>28</sup> But it is not necessary to disaggregate these filings into unique disputes to get a general sense of how SEP cases are

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<sup>24</sup> See for example Lubman and Peerenboom, *supra* Note

<sup>25</sup> Mark Cohen, “The Widening Impact of China's Publication of IP Cases,” *China IPR*, <<https://chinaipr.com/2018/04/10/the-widening-impact-of-chinas-publication-of-ip-cases/>>

<sup>26</sup> For more information on IP House as a database, see <<https://en.iphouse.cn/home/list/index/catid/16.html#advantage>>

<sup>27</sup> Search results as of December 13, 2019.

<sup>28</sup> These numbers do not add up to 77 because in Chinese courts, cases may only be heard on appeal once. In some instances, the court of first trial is a High Court (*gaoji fayuan*, 高级法院) with jurisdiction over a province or cities with a provincial designation (i.e. Beijing and Shanghai) with second instant appeals being heard at the Supreme People's Court, but others were heard at lower court levels such that an appeal would never get to the Supreme People's Court.

framed. In fact, simple aggregation in this exercise is actually helpful insofar as it amplifies cases litigated on appeal at higher levels. IP House reports the categorical reason for each case (*an you*, 案由), and an overwhelming majority of the of the 77 entries- 60, or 78% -were listed as “disputes over the infringement of invention patent rights” (*qinhai faming zhuanli quan jiufen*, 侵害发明专利权纠纷). Only seven (or nine per cent) were listed as either “disputes over the abuse of market position” (*lanyong shichang zhiwei diwei jiufen*, 滥用市场支配地位纠纷) or “monopoly disputes” (*longduan jiufen*, 垄断纠纷). The remaining listed reasons included five cases of “disputes over licensing contracts for patent implementation” (*zhuanli shishi xuke hetong jiufen*, 专利实施许可合同纠纷), four cases of “disputes over the infringement of practical use rights for new model patents” (*qinhai shiyong xinxing zhuanli quan jiufen*, 侵害实用新型专利权纠纷), and one case of a “dispute over responsibility for damages resulting from temporary measures in applying for intellectual property rights” (*yin shenqing zhishi chan quan linshi cuoshi sunhai zeren*, 因申请知识产权临时措施损害责任纠纷). Though cursory, these data suggest that by in large the courts are dealing with SEPs in terms of proprietary usage and rights more so than concerns over the abuse of market position.

However, pairing the set down to the seven cases listed as either disputes over the abuse of market position or monopoly disputes<sup>29</sup> reveals an important pattern. Two of the seven cases in the search result involve the exact same parties at different points in their dispute. The resulting six disputes involve the following parties:

1. Huawei and InterDigital Communications
2. Iwncomm and Apple
3. Qilu Pharmaceutuical and Sihuan Pharm
4. Meizu and Qualcomm
5. ZTE and Vringo
6. ZTE and InterDigital Communications

All but one of the disputes involve network/communication technology companies, and those five disputes all involve a Chinese tech company and a foreign party. An outside observer may thus be suspicious of proverbial home-cooking, especially with the prevalence of names like Huawei and ZTE in news stories about US President Donald Trump’s confrontation with China. Though Huawei in particular has aggressively pursued SEPs with international standard-setting organizations, the global SEP pool in these areas is still dominated by foreign firms.<sup>30</sup> In this regard it stands to reason that standing among market giants in court would involve multi-nationals, but such an observation is by no means mutually exclusive with overtones of industrial

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<sup>29</sup> This subset was verified by using IP House’s advance search function to search for the key word “标准必要专利” (standard essential patent) with the case reason (案由) of “垄断纠纷” (monopoly dispute). Though “滥用市场支配地位纠纷” (disputes over abuse of market position) was not a pulldown option for the case’s reason in the advanced search feature, the seven results nevertheless match the seven cases identified as being categorized as either 垄断纠纷 or 滥用市场支配地位纠纷 in the general search described above.

<sup>30</sup> Ibid Note 6.

policy asserting both a desire to break free from dependence on foreign technology and cultivate Chinese national champions.

These data, of course, do not fully illustrate the jurisprudence surrounding SEPs; case studies accomplish that task. The case that has garnered the most attention in this regard is the dispute between Huawei and InterDigital Communications listed above. Indeed, it has earned the designation of being a part of two classic cases (*dianxing anli*, 典型案例) in the Chinese legal system, both of which appear among the 77 search results from IP House described above.<sup>31</sup> The first case revolved primarily around China's Anti-Monopoly Law,<sup>32</sup> in which the Guangdong High People's Court ultimately affirmed the Shenzhen Intermediate People's Court ruling that InterDigital had abused its dominant market position in the 3G wireless standard SEPs in both China and the United States by charging Huawei a license fee well in excess of the fee it charged Apple and Samsung.<sup>33</sup>

The second case dealt directly with the issue of FRAND commitments. While InterDigital argued that its FRAND commitment was only an invitation for license negotiation, Huawei asserted an obligation on the part of InterDigital to license its SEPs under FRAND terms, be it based on contract, FRAND commitment, or the doctrine of fairness and good faith in Chinese law.<sup>34</sup> The Shenzhen Intermediate People's Court asserted and the Guangdong High People's Court affirmed that InterDigital was indeed obligated to license its SEPs on a FRAND basis and was not doing so due to the aforementioned discrepancy in licensing rates InterDigital charged Huawei and other market players.<sup>35</sup> The Guangdong High People's Court identified four factors to weigh in determining the FRAND rate: (1) the profits derived from the implementation of the patent/similar patents and the proportion thereof to the whole profit or sales revenue of the licensee's related products; (2) the extent to which the patentee derives additional benefits from its patented technology rather than the standard; (3) the patentee's effective patent in the standard, lest standard implementers pay royalties for non-SEPs present in the standard; and (4) the reasonable distribution of royalties amongst SEP holders, with royalties not exceeding a certain percentage of product profits.<sup>36</sup>

The courts' dealings with Huawei and InterDigital may not be entirely representative of all cases, but it is thought provoking. Sokol and Zheng point out that one interpretation of the decisions is that they "played to Chinese industrial policy concern of low royalty rates for the purpose of improving Huawei's position as a telecom equipment manufacturer with lower prices for a needed input."<sup>37</sup> But one may wonder about how discriminatory treatment might work in the opposite direction. For example, could a large company like Huawei successfully claim discriminatory treatment on the basis of small or medium Chinese enterprises at more inchoate stages of operation paying significant lower royalties for SEP technology? Such a question speaks to industrial policy concerns of balanced development between larger and smaller technology companies.

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<sup>31</sup> Indeed, the search results list "classic case" explicitly for these two entries.

<sup>32</sup> Jyh-An Lee, "The Legal Framework for FRAND Enforcement in China," in *Patents and Innovation in Mainland China and Hong Kong*, ed. Yahong Lie (New York: Cambridge University Press, 2017), 161.

<sup>33</sup> *Supra* note 19 at 316.

<sup>34</sup> *Supra* note 34 at 162.

<sup>35</sup> *Ibid* Note 35.

<sup>36</sup> Yang Cao, "The Development and Theoretical Controversy of SEP Licensing Practices in China," in *Multi-Dimensional Approaches Towards New Technology: Insights on Innovation, Patents and Competition*, ed. Ashish Bharadwaj et. al (Singapore: Springer Open, 2018), 157.

<sup>37</sup> *Ibid* Note 35.

Moreover, the four factors for weighing royalties adduced by the Guangdong High People's Court is redolent of the so-called top-down approach to FRAND licensing in which a royalty is a proportion equal to the total aggregate SEP royalty burden of particular standard multiplied by the share of that aggregate royalty that may be allocated to the SEP holder.<sup>38</sup> At a panel on anti-monopoly issues during the Berkeley-Tsinghua Conference on Transnational IP Litigation,<sup>39</sup> practitioners in the field noted that such a top-down approach seems to be the preferred and predominant methodology for FRAND valuation in Chinese courts. This preference is consistent with industrial policy goals, as it conceivably minimizes royalties paid to and thus costs incurred by technology enterprises looking to grow in an environment where the number of patents is exploding but certain industries are still under the heavy influence of titans from abroad.

The Guangdong High People's Court has since pushed such jurisprudence forward. In April of 2018, it issued its Working Guidelines on the Trial of Standard Essential Patent Disputes (Trial Implementation).<sup>40</sup> While the Guidelines do not use the precise term "top-down", they make clear that such an approach should be used to analyze the market value of the SEPs in a dispute.<sup>41</sup> When it comes to determining FRAND royalty rates, the Guidelines direct courts to take into account said market value of the SEPs in the dispute as well as comparable licensing agreements and the licensing conditions of comparable patent pools.<sup>42</sup> It bears emphasizing that these guidelines technically apply only to the courts in Guangdong Province (which includes the IT hotbed of Shenzhen). But the 77 IP House search results included 29 cases from Guangdong Province, second only to Beijing with 32. The Guidelines, localized though they may be on paper, can nevertheless significantly impact the jurisprudential treatment of SEPs in China.

But China's industrial policy goals suggest that there might be desirability in moving beyond Beijing and Guangdong, and one of their likely implications is that the classic cases of the future include if not be predominated by contention entirely between Chinese disputants rather than a Chinese party and a foreign antagonist. To be sure, it may actually be preferable to leave the issue of SEPs largely in the judiciary's hands. Such is the practice in the United States, where much deference is afforded to courts. The extent to which faith should be placed in Chinese courts is better left to other articles, but the fact remains that, as a political matter, the judiciary is an integrated component of the party-state. One need not impugn its competency or independence to recognize that it extends institutional frameworks that can be adjusted to optimize more over-arching goals.

#### **IV. Conclusion: Tweaking the System to Balance Policy Goals**

This article has proceeded on the basis that the industrial policy goals Chinese leadership has articulated in plans for technological innovation are instructive when considering how SEPs are dealt with. In the context of MLP and Made in China 2025, such goals are deeply intertwined with technologies of the future for which interoperability and thus the specter of SEPs are salient. But they also point to objectives that, though perhaps not contradictory, may tug in competing

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<sup>38</sup> See Supra Note 38 at 158

<sup>39</sup> Attended by the author on October 22, 2019.

<sup>40</sup> *Guangdong Sheng Zuigao Renmin Fayuan Guanyu Shenli Biaozhun Biyao Zhuanli Jiufen Anjian de Gongzuo Zhiying*, 广东省高级人民法院关于审理标准必要专利纠纷案件的工作指引(试行)

<sup>41</sup> Adrian Emch, "New SEP Guidelines from Guangdong," *Kluwer Competition Law Blog*, June 1, 2018, <<http://competitionlawblog.kluwercompetitionlaw.com/2018/06/01/new-sep-guidelines-guangdong/>>

<sup>42</sup> *Ibid.*

directions. Balancing integration with global technology and self-sufficiency is no small task, and grooming the next generation of industrial leaders while enabling small and medium enterprises is by no means easy. As China strives to do so, SEPs that straddle intellectual property and anti-monopoly concerns may either complicate or complement the process. The discussion up to this point suggests that China's SEP framework objectively reflects those goals, though there may be room for rebalancing. Most specifically, there is a strong and explicit foundation for invoking anti-trust and intellectual property concerns in the form of SEPs. As the Chinese market grows, so too may the pool of participants launching from this platform. But it is nevertheless worth contemplating how China may move away from accusations of local favoritism without sacrificing a position at the international table, all the while bolstering the prospects of its companies at home and abroad.

Given the extensive latitude afforded to it, one place to look may be the judiciary. The preference for a top-down approach in FRAND licensing seems logical for keeping the costs of a range of ambitious Chinese enterprises down, though international companies may not be so sanguine. Even so, transparency is ultimately most critical. Perhaps the Supreme People's Court could issue its own set of guidelines on what exactly to consider when judging what FRAND entails on a case by case basis. Such a move would formalize the paradigm for courts throughout the country, not just technically those in one province. Provided they are armed with a clear picture of the rules of the game, commercial actors can and will adjust.

But an equally relevant place to look is the legal and regulatory frameworks that the judiciary applies. Starting at the level of laws, one could argue that there could be value in formally defining SEPs in the patent law. Recall from the second section that proposed revisions to the Patent Law include a change in terminology from compulsory licenses to special licenses. Such terminology could raise the question of whether FRAND licensing constitutes such a special license. However, formally defining SEPs and the special types of licenses associated with them may not be critical, given that that endeavor has been pursued elsewhere (specifically in Article 13 of the Provisions on Prohibiting the Abuse of Intellectual Property Rights to Exclude and Restrain Competition).

The real lacuna, however, exists in China's Standardization Law and the Administrative Provisions for Patent-Related National Standards. It is understandable that, given China's political orientation and industrial policy goals, they be geared toward leaving ultimate decisions on standards with the state. But they need not be silent on the nature of interaction with international standards setting organizations and the integration of national standards with Chinese ones. The European Commission has pointed out that SEP owners often over-declare and as such may be in favor of imposing new requirements on standard-setting organizations to help eliminate hurdles to transparency in SEP license negotiations.<sup>43</sup> While China would need to proceed cautiously lest it raise concerns of protectionism, its Standardization Administration may consider following suit with new administrative measures to better flesh out the relationship between Chinese standards and international ones. Provided that international standard setting organizations remain free from direct state participation, more clearly established lines of interactions could be useful.

Whether Chinese leaders chose to pursue these kinds of actions or others, the issue of SEPs is here to stay, both for China and the world. The future of technology will require choices about

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<sup>43</sup> Dorris Johnson Hines and Ming-Tao Yang, "Worldwide Activities on Licensing Issues Relating to Standard Essential Patents," *WIPO Magazine*, February 2019, <[https://www.wipo.int/wipo\\_magazine/en/2019/01/article\\_0003.html](https://www.wipo.int/wipo_magazine/en/2019/01/article_0003.html)>

which technical standards are followed and how to continue promoting competitive innovation within them. For China specifically, it is analytically useful to judge such developments against the articulated goals and inherent tensions of the state's industrial policy.