## China's Utility Model Patent Legal System

Past, Present, and Future

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It is widely acknowledged in the world today that the fundamental goal of the patent system is to encourage invention and creation, promote technological achievement, international technological exchange, and economic development by recognizing and protecting the intellectual achievements of inventors. In this respect, China¹ is no exception. Patents have been playing an important role in stimulating technological innovation in the process of China's modern development. Especially noteworthy, the number of patents has exploded in the past decade.²

Although the initial establishment of China's intellectual property system started relatively late, this transplanted legal system has maintained rapid development in recent years. The fast-growing increase in the number of granted patents is one of the typical signs of this rapid development process. In general, the sharp increase in the number of patent grants reflects the fast-reviving progress of China's contemporary science and technology to a certain extent, but it should not be forgotten that the number of granted patents is merely one of the oft-used indicators of innovation ability.<sup>3</sup> In contrast, the quality of granted patents, invention patents in particular, is usually the best indicator of technological advancement. Unfortunately, the recent explosion in the number of patents in China has been accompanied by the emergence of low-quality patents, seriously eroding the legislative purpose of the patent system.<sup>4</sup> Such low-quality

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- <sup>1</sup> In this chapter, China refers to the mainland of the People's Republic of China.
- <sup>2</sup> See WIPO 2022a, 7, in which China ranked first again both in terms of worldwide patent applications and worldwide utility model applications.
- <sup>3</sup> According to the latest statistics and rankings released by the World Intellectual Property Organization, China still is not in the top-tier category in terms of global innovation power. See WIPO 2022b, 22 ("China moves up to 11th place").
- This type of detrimental effect has caught wide attention and research at home and abroad. E. g., see Liang 2014. ("As the number of patent applications and grants has grown rapidly, the quality of patents has not. A large number of patent applications pouring into the patent

patents are closely linked to patents in the category of utility model patents. Naturally, many take a dim view of this patent sphere with relatively low quality, or even no quality at all, that is, so-called "junk patents". These institutional and practical deficiencies suggest a pressing need for systemic improvement. As a result, China has steadily taken measures to improve the quality of its issued patents.

Since April 1, 1985, when China's first Patent Law<sup>7</sup> came into effect, China has established a legal protection system for utility models. At present, after four revisions of the Patent Law, China's utility model patent legal system has also been improved to a certain extent. However, among the authorized utility model patents, those that fully meet the necessary conditions of novelty and inventive step have not yet dominated. Of course, this phenomenon is not unique only in China. Historically and globally, utility model patents have been dubbed "petty patents" essentially on account of their limited scope, lower requirement for inventiveness, lack of stringent substantive examination, uncertainty of validity, and shorter term.

The purpose of this chapter is to illuminate the ongoing optimization of the Chinese utility model patent system in the context of the development of China's overall patent system. Accordingly, Section 11.1 traces the emergence of China's Patent System, including the Chinese utility model patent-based subsystem. Section 11.2 centers on the basic contours of the Chinese utility model patent system. Section 11.3 then summarizes existing deficiencies of the Chinese utility model patent system and future development trends. It concludes with a discussion of potential implications of proposed revisions to the Chinese utility model patent system.

# 11.1 FOUNDATION AND FORMATION OF CHINA'S UTILITY MODEL PATENT SYSTEM

## 11.1.1 Inception of China's Modern Intellectual Property System

At the beginning of the founding of the People's Republic of China in 1949, an intellectual property protection system involving the protection of patents,

examination department are not directly translated in the explosive growth of industrial innovation."); Prud'homme 2015b, 619–625 ("[t]he intellectual-property component of China's technological catch-up strategy has been geared towards, first, focusing on quantity of outputs and then eventually shifting towards ensuring the quality of outputs. Disconcertingly, in recent years, this strategy has created negative impacts on patent quality and thus may have hampered innovation in China.")

- <sup>5</sup> See infra Section 11.3.1.
- See e.g., Feng 2009, 54 (noting that the third amendment's "adoption of the standard of absolute novelty shows that the Patent Law of China has raised the requirements of quality of patent").
- 7 See Patent Law (1984). In addition, a series of translated multi-tiered legal documents are available on WIPO's website. WIPO 2024.

trademarks, and copyrights was implemented. However, from 1957 to 1979, these early intellectual property protection institutions disappeared. As one Western observer noted:

China's traditional failure to protect what the nonsocialist world refers to as industrial or intellectual property was evidence of Marxist hostility to the concept of private property, and particularly to monopolistic private control of socially useful inventions. In China, all inventions and technology were, for practical purposes, the property of the state.<sup>8</sup>

Initially, the formal establishment of modern intellectual property laws in the PRC after its reopening in the late 1970s was mainly encouraged by the United States. Thus, to a certain degree, "[t]he history of intellectual property laws in China is a history of legal transplants." Article VI of the Agreement on Trade Relations between the United States of America and the People's Republic of China, inter alia, epitomized this kind of international push. Specifically with regard to China's patent law, the initial general characteristics of the patent law enacted in 1984 after China's reopening resembled U.S. patent law. Nevertheless, on the other hand, China had self-motivated drivers, such as invigorating its domestic economy after weathering prior hardship, to formulate a modern legal system of intellectual property rights as well. For instance, as pointed out on the PEOPLE'S DAILY (Overseas Edition, January 20, 1992) by Wu Yi, then-deputy minister of Ministry of Foreign Economic Relations and Trade (MOFERT) and head of the Chinese Delegation at the negotiations:

To enhance the level of protection of IPRs of China, not only meets the need of further reform and opening to the outside world [and] the need of developing science and technology, but [also] meets the need of speeding up the construction of modernization of China.<sup>13</sup>

Thus, on the whole, the process of transplanting a western legal system of intellectual property rights to China was not a purely coercive process driven by foreign countries, like the ones in the Qing dynasty. <sup>14</sup> Rather, it was a process of amalgamation embodying both "push" and "pull" factors. <sup>15</sup>

<sup>&</sup>lt;sup>8</sup> See Theroux 1980, 228.

<sup>9</sup> The United States took a series of such bilateral measures to exert similar institutional push for similar effects in the 1980s. E.g., see Wilson 1988, 447.

<sup>&</sup>lt;sup>10</sup> See Yu 2016, 20.

<sup>&</sup>lt;sup>11</sup> See Agreement on Trade Relations (1979).

<sup>&</sup>lt;sup>12</sup> See Winter 1987, 330 ("China enacted a new patent law in 1984 that is quite similar to the system in the United States and other market economy countries").

<sup>&</sup>lt;sup>13</sup> See Dexi 1993, 288.

<sup>14</sup> See e.g., Hart 1907, 630.

<sup>15</sup> See Yu et al. 2022, 1553.

## 11.1.2 Basic Statutory Rationale for the Chinese Utility Model Patent Legal System

As noted in Chapter 1, there is no legally binding provision in the TRIPS Agreement<sup>16</sup> relating to Utility Model Patents. In addition, there are no articles in the Paris Convention embodying minimum substantive standards for the protection of utility model patents, except for some articles regarding international priority and national treatment.<sup>17</sup> As a result, utility model patent regulations were left to each jurisdiction's discretionary needs and priorities.

China initially introduced a utility model patent system in its 1984 Patent Law. In essence, the initial establishment of the Chinese utility model patent legal system was on a substratum of a hybrid of realistic needs. Even today, the fundamentally unchanged utility model patent system's lower inventiveness threshold legally permits technical followers rather than pioneers to seek protection for their minor or incremental inventions that would not otherwise be protected under the framework of patent law. Admittedly, there were pros and cons of whether to incorporate a utility model patent legal mechanism into the unprecedented patent law in the history of the PRC at the time. After taking stock of all sorts of relevant factors and weighing potential benefits and costs, China finally decided to include it in the patent law.<sup>18</sup>

In view of the generally low inventiveness threshold for Chinese utility model patents, this type of patent does not require substantive examination. The lack of examination has the benefit of alleviating the heavy workload of the Patent Office, a benefit shared by foreign Patent Offices with utility model patent systems. <sup>19</sup> At the early stage of China's patent system, the vast majority of patents were issued to foreigners, while the registration of utility models was primarily of benefit to domestic innovators. <sup>20</sup> Given that, by and large, China at the time lagged far behind the most technically innovative countries, there seemed to be no wonder why the vast majority of invention patents, particularly those representing technical breakthroughs, were issued to foreigners and in contrast utility models, without necessitating substantive examinations and typically focusing on mere incremental innovation, were much

<sup>&</sup>lt;sup>16</sup> See TRIPs Agreement.

<sup>&</sup>lt;sup>17</sup> See Chapter 1, Section 1.2.3.

See Kay 1985, 361 (noting the comment made by Huang Kunyi which provided the only official explanation for the final decision to include utility models, i.e., "Considering there are more small and medium sized enterprises in our country and a rather low industrial standard of technology, we will use the form of the utility model patent to stimulate the initiative and enthusiasm of the masses."). Similar views are confirmed by a successor of Mr. Huang Kunyi, i.e., Mr Gao Lulin. See Gao 2019, 193, 194.

<sup>19</sup> See Naumann 1958, 801 ("... the Patent Office had to examine a large number of patent applications that would not have been filed if there had been a utility model patent law.")

<sup>&</sup>lt;sup>20</sup> See Pager 2007, 803.

more accessible and attractive to domestic innovators with relatively lower innovation capabilities.

Judging from the metric of incremental innovation, there has been a clear demarcation line between normal applicants and abnormal applicants for Chinese utility model patents. The normal purpose of Chinese utility model patents is to enable applicants to profit from valuable incremental innovations. Thus, industries that attach importance to incremental innovations, such as food, transportation, domestic articles, and basic electronics, are the main normal users of Chinese utility model patents.<sup>21</sup>

For instance, in the field of refrigeration and air-conditioning, frequently seen technical inventions and creations are small-scale incremental improvements made on the basis of existing technologies. These small improvements may not meet the requirements of inventiveness for invention patents, but they can meet those requirements for Chinese utility model patents. Meanwhile, the costs of Chinese utility model patent applications and reviews are much lower than those of invention patents because there is no substantive examination process.<sup>22</sup>

Unlike normal Chinese utility model patent applicants, the main purpose of abnormal Chinese utility model patent applications deviates from the legislative purpose of the patent law and includes goals such as seeking occupational performance credits and promotions through Chinese utility model patent filings, rather than promoting incremental innovation. Squarely in response to these abnormal Chinese utility model patent applications and their concomitant detrimental effects, follow-up amendments to the Chinese utility model patent legal system have been gradually developed and enforced.

## 11.1.3 Follow-Up Amendments to Chinese Utility Model Patent Legal System

After the establishment of the Chinese utility model patent legal system, there was growing awareness of deficiencies that necessitated amendments to the system. As a result, Chinese utility model patent-related institutional revisions on different levels were implemented. These fall into two categories. One category consists of revisions embodied in a series of patent law amendments (including subsequent implementation rules) and the other includes revisions that wholly or partially touched upon Chinese utility model patent-related issues in multi-level patent-related official documents.

### 11.1.3.1 Patent Law Amendments

The 1992 Patent Law extended the term of Chinese utility model patents from five years to ten years and thus, in so doing, greatly enhanced the legal protection of

<sup>&</sup>lt;sup>21</sup> See Yang 2014, 411.

<sup>&</sup>lt;sup>22</sup> See Xue 2020, 1.

Chinese utility model patents. In the 2008 revision of the Patent Law, an absolute novelty standard was implemented for both utility model and invention patents,<sup>23</sup> which substantially raised the standard for a utility model patent. Procedurally, the same applicant was allowed to apply for a utility model patent and an invention patent for the same invention at the same time, and a utility model patent could make up for the lack of temporary protection measures during the pendency of an invention patent application. Subsequently, in the revision of the Detailed Rules for the Implementation of Chinese Patent Law in 2010, the scope of preliminary examination of utility model patent applications was further expanded, and the examination of manifest novelty defects and manifest practicality defects was added,<sup>24</sup> so as to improve the quality of utility model patents. These amendments embody the most important Chinese utility model patent-related institutional overhauls, but more detailed operating rules aimed specifically at implementing and supplementing those overhauls were dispersed among a host of multi-level patent-related official documents discussed below.

#### 11.1.3.2 Multi-level Patent-Related Official Documents

Given the widely perceived low quality of a large number of granted Chinese utility model patents, relevant governmental bodies like the China National Intellectual Property Administration (CNIPA),<sup>25</sup> envisioned an array of regulatory rules aimed at decreasing or gradually eliminating the issuance of low-quality patents.

In this regard, the SIPO for the first time released a specific administrative regulation: Several Provisions of the State Intellectual Property Office on Regulating Patent Application Activities<sup>26</sup> in 2007 seeking to inhibit abnormal patent application activities.<sup>27</sup> Put another way, this regulation provided an unprecedented official definition on what shall be regarded as "abnormal patent application activities". According to Article 3, activities that fall within the ambit of either of the two specifically listed scenarios qualify as "abnormal patent application activities". One is "the same entity or individual submits multiple patent applications of evidently similar content or instigates any other person to submit multiple patent applications of evidently similar content"; the other is "the same entity or individual submits multiple patent applications involving evidently plagiarized existing

<sup>&</sup>lt;sup>23</sup> See Patent Law (2008, art. 9, 22).

<sup>&</sup>lt;sup>24</sup> See Detailed Rules (2010, art. 44).

This new English name was adopted on August 28, 2018. See The State Council of the People's Republic of China, 2018. For the purpose of precision, this article uses the new English name for all the events and documents released after the Notice and the previous name, State Intellectual Property Office (hereinafter SIPO), for earlier events and documents.

<sup>&</sup>lt;sup>26</sup> See Order No. 45 (2007).

<sup>&</sup>lt;sup>27</sup> See Order No. 45 (2007, art. 3).

technologies or designs or instigates any other person to submit multiple patent applications involving evidently plagiarized existing technologies or designs."

Before the administrative adjustment in 2013, the preliminary examination system for utility model patent applications implemented in China did not allow the use of search methods, which inevitably caused "examination of obvious substantive defects" in the utility model patent examination process to be de facto useless in the actual examination process. The administrative adjustment in 2013 fixed this institutional loophole by stipulating that:

Where a utility model may involve an abnormal application, such as the obvious copying of prior art or the repeated submission of an application for a patent whose content is apparently identical in substance, the examiners shall, on the basis of the comparative documents retrieved or information obtained through other means, examine whether the application for a utility model patent is obviously lacking in novelty.<sup>28</sup>

Subsequently, the SIPO issued the Decision of the State Intellectual Property Office on Amending the Several Provisions on Regulating Patent Application Activities (2017)<sup>29</sup> and the amended Article 3<sup>30</sup> of the previously released Several Provisions of the State Intellectual Property Office on Regulating Patent Application Activities in 2007 expanded coverage of the definition of "abnormal patent application activities".

Even with these reforms, the view of many in the government was that abnormal patent applications were neither sufficiently under control nor completely eliminated. Thus, in 2021 the CNIPA published the Notice by the China National Intellectual Property Administration of Further Strictly Regulating Patent Application Activities.<sup>31</sup> This is the first time that the CNIPA institutionally underscored the necessity of "eliminating abnormal patent application activities not intended for protecting

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<sup>28</sup> See Order No. 67 (2013, part I).
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In item (1), "or instigates any other person to submit multiple patent applications of evidently similar content" is deleted.

In item (2), "or instigates any other person to submit multiple patent applications involving evidently plagiarized existing technologies or designs" is deleted.

One item is added as item (3):

"(3) The same entity or individual submits multiple patent applications in which different materials, ingredients, proportions and components, among others, are simply replaced by each other or re-combined."

One item is added as item (4):

"(5) The same entity or individual submits multiple patent applications for the product's shape, pattern or color randomly generated by computer technologies."

Item (3) is renumbered as item (6) and amended to read:

<sup>&</sup>lt;sup>29</sup> See Order No. 75 (2017).

<sup>&</sup>lt;sup>30</sup> See Order No. 75 (2017, part I).

<sup>&</sup>quot;(6) help any other person to submit or the patent agency submits patent applications as set forth in items (1) to (5) of this article."

<sup>&</sup>lt;sup>31</sup> See Notice by the China National Intellectual Property Administration (2021d).

innovation" and thereby eliminating previous undesirable effects of "seriously disturbing administrative order, injuring the public interest, interfering with enterprise innovation, wasting public resources, and undermining the patent system" for the sake of "strictly implementing the requirements for high-quality development, further regulating patent application activities, improving the quality of patent applications". Soon after this Notice, the CNIPA formally released the Measures for Regulating Patent Application Activities, 32 which is addressed in the next section.

## 11.2 MAIN FEATURES OF EXISTING CHINESE UTILITY MODEL PATENT LEGAL SYSTEM

#### 11.2.1 Protection Standards for Utility Models

The substantive standard for issuing Chinese utility model patents is one of the key components in the Chinese utility model patent legal system and one of the most controversial as well. To a great extent, the quality of Chinese utility model patents is contingent on a set of substantive standards. As shown above, many subsequent multi-level Chinese utility model patent-based institutional improvements also surround this key component.

The current protection standards are enshrined in article 22 of the 2020 Patent Law which states that a "utility model for which a patent is to be granted shall be novel, inventive and practically applicable". Particularly with regard to the standard of inventiveness, a salient distinction between invention patents and utility model patents is stressed, that is:

Inventiveness means that, as compared with the technology existing before the date of application the invention has prominent substantive features and represents a notable progress and that the utility model patent has substantive features and represents progress.

In addition, there are detailed operating guidelines in the Guidelines for Patent Examination<sup>33</sup> issued by the CNIPA. Some of the proposed revisions are discussed in Section 3.2.

#### 11.2.2 Basic Process for Obtaining a Utility Model Patent

The application process for utility model patents today is largely electronic via the China Patent Electronic Application Network.<sup>34</sup> Normally, the process comprises nine steps:

<sup>&</sup>lt;sup>32</sup> See Announcement No. 411 (2021).

<sup>33</sup> See Order No. 78 (2023).

<sup>&</sup>lt;sup>34</sup> See China Patent Electronic Application Network 2024.

- 1. Going through the e-application for user registration
- 2. Preparing to create the electronic application documents
- 3. Making electronic application documents
- 4. Checking the documents before submission
- 5. Signing with a digital certificate
- 6. Submitting documents and receiving receipt
- 7. Receiving electronic notification of application
- 8. Submitting supporting documents
- 9. Checking the website for post-application information

Specifically with respect to step 8, a brief explanation is in order:

For the relevant documents that should be submitted in the original form according to the Patent Law and its rules for implementation and the Patent Examination Guidelines, the applicant may submit only the electronically scanned original documents; If the electronically scanned documents cannot be submitted due to actual limitations, the original documents can be submitted. In the former case, the examiner may, if necessary, require the applicant to submit the original within a specified time limit.<sup>35</sup>

#### 11.2.3 Chinese Utility Model Patent to Invention Patent Conversion Mechanism

Under the patent law, a utility model patent can be converted into an invention patent provided that some legally defined requirements are met. Article 9 of the patent law embodies the essential requirement in this regard:

Only one patent right can be granted for the same invention. However, where the same applicant applies for both a utility model patent and an invention patent for the same invention on the same day, and the patent right for utility model obtained earlier has not been terminated, and the applicant has declared to renounce the patent right for utility model, a patent right for invention may be granted.<sup>36</sup>

Generally speaking, the reasons which would motivate the holder of a utility model patent to convert it to an invention patent essentially depend on commercial strategy. To be more specific, for an invention related to a product that can be put on the market quickly and that can easily be imitated, if its market life is expected to be relatively short, a utility model patent is often applied for, so as to achieve the purpose of obtaining the patent right protection as quickly as possible. On the contrary, an invention patent is usually applied for if more stringent inventiveness standard can also be met.

<sup>35</sup> See China Patent Electronic Application Network 2024.

<sup>&</sup>lt;sup>36</sup> See Patent Law 2020.

For an invention related to a product with both anticipated short-term and long-term market benefits, the applicant will often consider applying for both an invention patent and a utility model patent, if possible. In this way, the utility model patent application can be authorized earlier and protection will be available more quickly. Then, after the invention patent is granted, the protection can continue to be extended via the invention patent.

#### 11.2.4 Validity-Challenging Procedure for an Authorized Utility Model Patent

A utility model patent is prima facie valid until proven otherwise. There are two viable ways of challenging an authorized utility model patent's validity in China. The first one is the administrative reexamination procedure governed by the Patent Reexamination and Invalidation Department of the CNIPA.<sup>37</sup> Examples of these challenges are publicly available on the website of this department.<sup>38</sup>

The second way is through the civil judicial procedure by competent courts. There are many adjudicated legal cases in which the validity of asserted utility model patents has been challenged. At least some of them are available online. The case Bai Wanqing v. Chengdu has been categorized as a guiding case (指导案例) by the Judicial Committee of the Supreme People's Court.<sup>39</sup> In this case, on the basis of the specifications of the patent involved and the evidence provided by Bai Wanqing, the court found that it was difficult for technicians in the field to determine the specific scope or definition of "high magnetic inductivity" as claimed, nor could they accurately determine the protection scope of the claims and make a substantive comparison for infringement between the asserted patent and the alleged infringing product. Therefore, the Supreme People's Court upheld the lower court's determination that Bai Wanqing failed to produce evidence to prove that the alleged infringing product fell within the scope of the claims.

### 11.2.5 Judicial Protection Mechanism for Utility Model Patents

The ultimate institutional avenue for assessing the substantive standards of patent-ability for utility model patents is the judiciary. In order to be in line with Article 62.5 of the TRIPS Agreement, which stipulates that administrative decisions in any proceeding for the acquisition and maintenance of intellectual property rights must be subject to judicial review, the 2000 Patent Law removed the prior finality of the Reexamination Board's decision on the validity of the patent right for utility models and designs.

<sup>37</sup> As regards an official introduction to this department, including history, main responsibilities, organization, examination system, examination procedure, and a number of latest statistics, see CNIPA 2021a.

<sup>&</sup>lt;sup>38</sup> See CNIPA 2024.

<sup>39</sup> See Bai Wanging (2015).

Today, the judicial assessment of utility model patents has been playing an increasingly important role. In this specific context, a recently noteworthy case finally adjudicated by the Guangdong High People's Court, *Gree v. Aux*,<sup>40</sup> set a new national record in terms of the amount of damages (40 million RMB) arising from an alleged Chinese utility model patent infringement. According to a judge in this court, "this is the largest intellectual property case ever awarded by a court in the field of home appliances."<sup>41</sup>

## 11.3 DEFICIENCIES AND DEVELOPMENT TRENDS OF CHINESE UTILITY MODEL PATENT LEGAL SYSTEM

China's current utility model patent legal system has pros and cons. On one hand, it has advantages such as "the rapid protection of short-lived innovations". <sup>42</sup> On the other hand, deficiencies have long been identified, particularly over the past decade, which have resulted in national attention and corresponding multi-level official institutional revisions to the law.

#### 11.3.1 Main Deficiencies of the Chinese Utility Model Patent Legal System

There are two principal types of deficiencies in China's current utility model patent legal system. One of these deficiencies is shared by utility model patent systems around the globe: the existence of a large quantity of UMPs with low quality. <sup>43</sup> The other type of deficiency, which is a series of domestic subsidy-related and tax-related industrial policies mostly misused by domestic enterprises, is more indigenous <sup>44</sup> in nature. Even so, in practice, these two kinds of deficiencies seem to be inseparable from each other.

## 11.3.1.1 Utility Model Patent-Based Intrinsic Deficiencies

Chinese utility model patent-based controversies are due in part to the long-debated proliferation of "junk patents" or, at a minimum, "questionable patents". The definition

- 41 See Chen 2020, 85-89.
- <sup>42</sup> See Naumann 1958, 803.
- 43 See Naumann 1958, 814 ("... there are already far-too many patents, whose level of invention is not very high").
- <sup>44</sup> China has increasingly realized the undesirably detrimental effects of crafting and implementing those subsidy-related and tax-related industrial policies in recent years. As a result, some corrective measures have been implemented. For instance, the CNIPA released the Notice on Continuously Strictly Regulating Patent Application Behavior so as to gradually reduce all kinds of financial support for patent grants by at least 25 percentage points per year until all are eliminated by 2025. The ultimate objective of this Notice is to further eliminate the adverse effects of evaluation indicators and patent subsidy policies, place greater emphasis on high-quality development, and correct the tendency to blindly pursue quantity. See Xinhua News Agency 2022.

<sup>&</sup>lt;sup>40</sup> See Case No. 390, First Instance (Guangdong High People's Ct. 2017); Case No. 1132, Second Instance (Guangdong High People's Ct. 2018).

of "questionable patent" is subject to different opinions. According to Tian Lipu, former director of CNIPA, there is an essential difference between "questionable patents" and "junk patents". The terminology of "questionable patent" refers to a patent whose scope of protection is too broad or the patent right per se does not comply with the relevant provisions of the Patent law even after the patent is granted. The terminology of "junk patents" refers to patents that do not contain any innovative content. These so-called "junk patents" are concentrated in two areas: utility model and design. 46

These "abnormal" patents have triggered serious concerns at home and abroad. About a decade ago, many observers of China's patent system equated "junk patents" with "utility model patents".<sup>47</sup> This observation echoed the corresponding public sentiments concerning the often-reported "low-quality" status of utility model patents. Yet there may be only a small difference between patents that claim a trifling technical improvement and patents that have no innovative content. Consequently, to some degree, as long as the Chinese utility model patent legal system exists in its current form, the issuance of Chinese utility model patents on low-quality inventions may be inevitable.

#### 11.3.1.2 Chinese Utility Model Patent Filing Trends and Responses

According to WIPO, in 2021, China received 1.59 million patent applications, more than twice as many as the United States.<sup>48</sup> Moreover, as regards utility model patents, the vast majority of applications worldwide are filed by Chinese applicants.<sup>49</sup> As indicated by WIPO, there were 2,852,219 Chinese utility model patent applications in 2021 with 99.76 percent filed by domestic applicants (2,845,318 domestic applications).<sup>50</sup> Moreover, even though the working rate of Chinese utility model patents, as measured by the CNIPA, has been increasing steadily over the past

<sup>45</sup> Observers argued that "patent subsidies incentivize applicants to file opportunistic applications for inventions of low patentability or low value that would have not been filed without those subsides. Thus they claim that most filings in this China patent boom are so-called 'junk inventions'." see Lei et al. 2013, 2.

<sup>46</sup> See Legal Daily 2005.

<sup>&</sup>lt;sup>47</sup> See e.g., Prud'homme 2012 ("particularly observers of China's patent system, appear to only consider invention patents as of good quality, whereas all non-invention patents (or utility models in particular), are 'junk' (low quality)".). See also Moga 2012, 8 (noting that "the Chinese utility model patent – which, in 2011, represented 35.8% of the 1,633,347 patent applications filed in China – is contrary to the national innovation initiatives and threatens the health and growth of Chinese business that it was intended to help."). In contrast, other sharply opposite views regard China's utility model patents as treasure rather than trash. See e.g., Lui 2014, 253 (stressing that China's utility model patents are "absolutely not trash at all. On the contrary, they, in fact, are definitely treasure.").

<sup>&</sup>lt;sup>48</sup> See World Intellectual Property Organization 2022a, 9.

<sup>49</sup> See Yu 2017, 51-58.

<sup>&</sup>lt;sup>50</sup> See CNIPA 2022b.

five years, nearly 40 percent of granted Chinese utility model patents have not been practically used via effective working.<sup>51</sup>

Commentators have theorized that the underlying cause of these filing trends, especially in the past 10 years, is attributable, at least in part, to domestic subsidy-related and tax-related industrial policies that incentivized the filing of patent applications. These policies had been initially formulated to encourage domestic innovation but were misused by many domestic enterprises that pursued an "innovation by numbers" strategy designed to maximize patent filings without regard to the quality of the underlying inventions.<sup>52</sup>

#### 11.3.2 Development Trends in the Chinese Utility Model Patent Legal System

Long vexed by the institutional issues described above, China has been exploring a range of reforms to the Chinese utility model patent legal system. Reform proposals have been made both by academics and legal practitioners, some of which are briefly summarized below.<sup>53</sup>

#### 11.3.2.1 Domestic Model Patent-Related Reform Proposals

Some scholars have proposed a range of modifications to the Chinese utility model patent legal system to avoid its worst abuses. For example, three Chinese scholars have recently argued that:

A more rational Chinese utility model patent institution should follow the path of Japan and South Korea and take the initiative to considerably reduce the institutional dependence when nearing or entering the phase of high-income countries. Therefore, the government should weaken the incentive policy for the number of utility model patents, take the initiative to adjust the examination system for utility model patents, steer the market to decrease the use of Chinese utility model patent institution timely, and enhance the contribution of the patent system to economic growth.<sup>54</sup>

A somewhat more radical view is that the Chinese utility model patent legal system should be completely abolished instead of being partially revised. One commentator adopting this position has noted that:

Without public examination of utility model patents, the public cannot raise objections to patented technologies. Once a utility model patent is granted, it becomes a deadly tool for some big companies to beat small ones. Invalidation

<sup>&</sup>lt;sup>51</sup> See China Patent Survey Report 2021, 33.

<sup>&</sup>lt;sup>52</sup> See Li and Zheng 2016, 60-73.

<sup>53</sup> See e.g., Zhu 2015 (proposing a four-dimensional revamping scheme for improving Chinese utility model patents' quality).

<sup>54</sup> See Mao et al. 2018.

and litigation cost a lot of money for small companies, and they can't afford to have a bunch of patents thrown at them.<sup>55</sup>

In response to this view, the CNIPA officially responded:

For more than 30 years, the Chinese utility model patent system has played an important and positive role in stimulating innovation enthusiasm, promoting technology transformation and protecting innovation achievements. As for the problem that 'there is no public examination of the patent for utility model and the public cannot raise objections to the patented technology' mentioned by you, the following measures can be taken under the current institutional framework: First, for the authorized utility model patents, any entity or individual that considers that the grant of the patent right does not comply with the relevant provisions of the Patent Law may file a request for invalidation; Second, in order to make up for the deficiency that the application for a utility model patent has not been substantively examined, paragraph 2 of Article 61 of the Patent Law provides that, where a patent infringement dispute involves a utility model patent, the people's court or the administrative department for patent affairs may require the patentee or an interested party to produce an evaluation report on the patent right made by the CNIPA; Third, in a patent infringement dispute, if the accused infringer has evidence to prove that the technology applied is prior art, he may file a defense against prior art in accordance with Article 62 of the Patent Law.<sup>56</sup>

Given such indications by CNIPA, it is unlikely that the Chinese utility model patent system will be abolished in the near future. Rather, the key question is how to reform it so as to eliminate its worst abuses.

Recently, the patent community in China was called upon to consider ways that the Chinese utility model patent legal system could be modified to eliminate its worst abuses. In the past decade, in response to this badly needed answer for this key question, numerous suggestions have been offered from various perspectives.

## 11.3.2.2 Further Proposals for Chinese Utility Model Patent-Focused Institutional Overhauls

Chinese utility model patent reform measures are currently going on in China, especially on the national level. The most significant of these is focused on raising the level of innovation quality embodied in utility model patents by requiring that utility model patent applications be substantively examined for inventiveness. In reality, the arguments for adding a substantive examination mechanism for evaluating inventiveness of utility model patents are not new. Such arguments have previously been made by academia and even some high-level government

<sup>55</sup> The State Council of the People's Republic of China 2021a.

<sup>&</sup>lt;sup>56</sup> The State Council of the People's Republic of China 2021a

officials.<sup>57</sup> These earlier actions laid the groundwork for the CNIPA to officially identify in 2021 the necessity of "eliminating abnormal patent application activities not intended for protecting innovation" for the sake of "strictly implementing the requirements for high-quality development, further regulating patent application activities, improving the quality of patent applications" in its above-mentioned Notice.<sup>58</sup> As of this writing, two noteworthy Chinese utility model patent-centered national initiatives are being advanced aimed at raising the level of innovation quality embodied in utility model patents.

First, in 2021, the CNIPA released a Notice on Soliciting Public Opinions on the Draft Revision of the Guidelines for Patent Examination (Draft for Comment)<sup>59</sup> which addressed the level of inventiveness in the process of preliminary examination of utility model patent applications. The relevant sentence in the Notice reads:

Based on the information available to the examiner regarding the prior art, the examiner may examine whether the application for a utility model patent lacks obvious inventiveness.

The incorporation of this new factor of "obvious inventiveness" into the Guidelines for Patent Examination is intended to reduce the number of low-quality Chinese utility model patents that are issued.

The second initiative is the Promotion Plan for In-depth Implementation of the Opinions on Strengthening the Protection of Intellectual Property Rights<sup>60</sup> (hereinafter the Promotion Plan). This is the latest comprehensive national administrative plan aimed at effectively promoting the recent top-level IP strategy co-issued by General Office of the CPC Central Committee and The State Council.<sup>61</sup> The Promotion Plan covers a wide range of IP-based affairs, including 114 items of national emphasis, including one relating to utility model patents. The 26th item of the Promotion Plan reads:

To push forward the reform of the utility model patent institution and introduce an examination mechanism for screening utility model patent applications that obviously lack inventiveness. (To be completed by the end of December 2025)

Again, this statement reiterates the Chinese government's desire to reduce the number of low-quality patents, including Chinese utility model patents, that are being issued.

<sup>57</sup> See e.g., Chen 2013 (arguing that "adding a substantive examination mechanism for evaluating inventiveness when appropriate").

<sup>&</sup>lt;sup>58</sup> See CNIPA 2021a.

<sup>59</sup> See CNIPA 2021b. In addition, on October 31, 2022, the CNIPA issued the Notice on Soliciting Public Opinions on the Draft Revision of the Guidelines for Patent Examination (Draft Again for Comment). CNIPA 2022a.

<sup>60</sup> See CNIPA 2022c.

<sup>&</sup>lt;sup>61</sup> See The State Council of the People's Republic of China 2019.

The core concern in implementing this reform will thus be defining an appropriate level of non-obviousness for screening utility model patent applications. In doing so, policy makers should be cautious against introducing an excessively high level of inventiveness, which could blur the line between invention patents and utility model patents and thus render the utility model patent legal system meaningless.

To date, the Detailed Rules for the Implementation of the Patent Law of the People's Republic of China has recently been amended at the end of 2023 and has just come into effect on January 20, 2024. Article 50 of this set of amended Rules explicitly stipulates the above-mentioned enhanced non-obviousness screening standard for utility model patent applications. In addition, to be in tandem with the implementation of the amended Detailed Rules for the Implementation of the Patent Law, Guidelines for Patent Examination was amended at a synchronized pace, which has just come into effect on January 20, 2024 as well. According to the newly amended Guidelines, "examiners can examine whether a utility model patent application obviously lacks inventiveness based on the information they have obtained about the prior art."

Even so, it is likely that the final achievement of this socially desirable optimal level of inventiveness will necessitate a continuum of adjustments. As a result, the real implementation effects of the above-mentioned reforms remain to be seen in the coming years.

Although it is impossible to second-guess all future Chinese utility model patent-based institutional reforms, there is no doubt that China will make this legal institution better-suited to its increasingly stressed innovation-related development land-scape for the sake of achieving the ultimate strategic objective enshrined in *An Outline for Building a Powerful Intellectual Property Nation* (2021–2035). <sup>65</sup> That is, Chinese utility model patent-based institutional refinements might be regarded as a means of "achieving a high level of scientific and technological self-reliance, stepping into the forefront of innovative countries". <sup>66</sup>

#### 11.4 CONCLUSION

China originally introduced the Chinese utility model patent system in response to external pressures on its intellectual property system. Then, in an effort to bolster domestic innovative activity, it introduced a series of incentives and subsidies that resulted in overuse of the Chinese utility model patent system, yielding a large number of low-quality utility model patents for which it has received both domestic and international criticism. In an effort to reform this system, China has introduced

<sup>&</sup>lt;sup>62</sup> See Detailed Rules (2023).

<sup>&</sup>lt;sup>63</sup> See Order No.78 (2023).

<sup>&</sup>lt;sup>64</sup> See Order No. 78 (2023, 70).

<sup>&</sup>lt;sup>65</sup> See The State Council of the People's Republic of China 2021b.

<sup>66</sup> See The State Council of the People's Republic of China 2022.

new procedural requirements to its utility model patent legal system, including, most importantly, a substantive examination to determine whether an application obviously lacks inventiveness. While the precise definition of this threshold is yet to be developed, policy makers should seek to maintain at least some difference between utility model patents, which serve valuable social goals, and ordinary patents, which are subject to a higher standard of inventiveness. Hopefully, these essentially self-driven ongoing technology-enhancing initiatives may benefit not only China but also contribute to a globally virtuous cycle of technological competition.<sup>67</sup>

<sup>67</sup> Coincidentally, China's ongoing inventiveness-enhancing moves towards further optimization of the Chinese utility model patent system echoed some notable foreign proposals for desirable improvements to the Chinese utility model patent system, especially from technically advanced countries or regions. E.g., the EU put forward a specific suggestion on improving the Chinese utility model patent registration mechanism by introducing a higher threshold as regards the inventive step. See European Commission 2023b, 19.