AIPLA QUARTERLY JOURNAL

Volume 53, Number 2 Page 345 Spring 2025

# CHINA'S UTILITY MODEL SYSTEM: A FRAMEWORK TAILORED TO THE COUNTRY'S SPECIFIC ECONOMIC AND DEVELOPMENTAL CONTEXTS AND OBJECTIVES

*Xiongying Tu**



 His biographical information can be found on LinkedIn at: https://www.linkedin.com/in/xiongyingtu/.

LIST OF TABLES

LIST OF FIGURES

## I. INTRODUCTION

A utility model patent, also known as a "utility innovation" or "innovation patent," differs from an invention patent in that it may protect incremental inventions, which are typically novel technological improvements that fall short of the inventiveness or non-obviousness criteria required for the invention patent.[1]

Approximately seventy-six countries and regional patent offices worldwide have provisions for the utility model patent.[2] This demonstrates the global recognition and acceptance of utility model patents as a form of intellectual property protection.

Since the WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) was negotiated during the 1986–94 Uruguay Round, the global intellectual property environment has become more predictable and consistent.[3] The TRIPS agreement establishes standards for the availability, scope, and use of seven intellectual property forms: copyrights, trademarks, geographical indications, industrial designs, invention patents, layout designs for integrated circuits, and undisclosed information (trade secrets).[4]

---

1 Gautam Sharma & Hemant Kumar, *Exploring the Possibilities of Utility Models Patent Regime for Grassroots Innovations in India*, 23 J. INTELL. PROP. RTS. 119, 121–22 (2018).

2 *Utility Models*, WIPO, https://www.wipo.int/patents/en/topics/utility_models.html [https://perma.cc/A48N-X4WE] (explaining that the following countries and regional patent offices offer utility model patent protection: Albania, Antigua and Barbuda, Argentina, Armenia, Australia, Austria, Belarus, Belize, Botswana, Brazil, Bulgaria, Chile, China, Costa Rica, Croatia, Czech Republic, Denmark, Dominica, Dominican Republic, Egypt, El Salvador, Estonia, Ethiopia, Finland, France, Georgia, Germany, Ghana, Greece, Guatemala, Honduras, Hungary, Indonesia, Ireland, Italy, Japan, Kazakhstan, Kenya, Kyrgyzstan, Lao People's Democratic Republic, Malaysia, Mexico, Mongolia, Mozambique, Oman, Namibia, Nicaragua, Panama, Paraguay, Peru, Philippines, Poland, Portugal, Republic of Korea, Republic of Moldova, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Spain, Swaziland, Tanzania, Thailand, Tonga, Trinidad and Tobago, Turkey, Uganda, Ukraine, United Arab Emirates, Uruguay, Uzbekistan, Viet Nam, ARIPO, OAPI, and the Andean Community).

3 Daniel R. Cahoy & Lynda J. Oswald, *Is Legal Harmonization Always Better? The Counter-Case of Utility Models*, 58 AM. BUS. L.J. 525, 526 (2021).

4 Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, 33 I.L.M 1197, 1869 U.N.T.S. 299.

However, utility model patents are not explicitly addressed within the TRIPS Agreement. While the Paris Convention for the Protection of Industrial Property recognizes the existence of utility model patents, it does not oblige its member countries to provide such protection.[5]

The lack of explicit provisions for utility model patents in the TRIPS Agreement has led to their different treatment among member countries. Consequently, utility model patents' availability, requirements, and procedures become more divergent rather than toward harmony across member countries, which sets them apart from the seven progressively harmonized intellectual property rights.[6] This divergence can create challenges for companies that operate globally, as they must navigate different rules and procedures in different countries to protect their interests.

However, some scholars contend that divergence in the utility model patent may be acceptable and desirable, as it allows countries to experiment based on their unique economic and developmental contexts.[7] This flexibility allows for accommodating country-specific differences, fostering experimentation on best practices, and achieving efficiencies that have been overlooked in the pursuit of harmonizing the protection of other types of intellectual property rights.[8]

China, as a rapidly developing nation, presents an intriguing case study where the utility model system is designed to align with its specific economic and developmental context. China implemented its first Patent Law on April 1, 1985.[9] Over the past thirty-eight years, China has become the leading country in the number of patent applications, accounting for forty-six percent of the world total in 2021.[10] In 2021, China also surpassed the United States to become the top

---

5 Uma Suthersanen, UTILITY MODELS AND INNOVATION IN DEVELOPING COUNTRIES 3 (2006), https://unctad.org/system/files/official-document/iteipc20066_en.pdf [https://perma.cc/D7S6-9V9P].

6 Cahoy & Oswald, *supra* note 3, at 527.

7 *Id*. at 528.

8 *Id*. at 528–29.

9 *See* Patent Law (promulgated by the Standing Comm. Nat'l People's Cong., Mar. 12, 1984, effective Apr. 1, 1985, amended Oct. 17, 2020), art. 82 (China), http://english.cnipa.gov.cn/col/col3068/index.html [https://perma.cc/2HVB-5CTY].

10 WIPO, IP FACTS AND FIGURES 2022 9 (2022), https://www.wipo.int/edocs/pubdocs/en/wipo-pub-943-2022-ewipo-ip-facts-and-figures-2022.pdf [https://perma.cc/L3D5-BXX4].

jurisdiction in terms of the number of patents in force,[11] largely driven by the significant number of utility model patents granted.

Meanwhile, China has grown to become the world's second-largest economy, following the United States, from one of the poorest countries in the world. On the other hand, the United States does not provide utility model patent protection in its patent law despite being the world's largest economy and the most research and development-intensive country.

Why does China choose utility model patents to protect incremental inventions? Are these utility models intended to correlate with the level of economic development and R&D intensity? Can utility models help China promote its innovative activities?

This paper explores China's utility model system, which is strategically designed to align with national economic objectives by considering the country's inventor profiles and economic development.

Part 1 of this paper analyzes the increasing significance of utility model patents in China's patent landscape and their synchronized rise with the country's economic progress.

Part 2 explores the role of utility model patents in driving innovation by providing accessible protection for incremental inventions, particularly benefiting micro and small enterprises (MSEs) and individual inventors.

Part 3 examines the laws, regulations, and procedural framework governing utility model patents in China. It highlights how the utility model system adapts to evolving economic and developmental contexts while empowering MSEs.

Part 4 discusses China's efforts to enhance the quality and integrity of utility model patents. The effectiveness of the system hinges on continuous efforts to address challenges and improve the quality and authenticity of utility model patents. A sustained commitment to refinement is essential for maintaining a balanced and effective utility model system.

The final part evaluates the impact of utility model patents on innovation and economic development. It illustrates how utility model patents drive China's economy, innovation, and technological progress.

---

[11] WIPO, WORLD INTELLECTUAL PROPERTY INDICATORS 2022 16 (2022), https://www.wipo.int/edocs/pubdocs/en/wipo-pub-941-2022-en-world-intellectual-property-indicators-2022.pdf [https://perma.cc/Q875-C8E6].

## II. THE RISE OF UTILITY MODEL PATENTS IN CHINA'S INNOVATION LANDSCAPE: A LINK BETWEEN ECONOMIC GROWTH AND TECHNOLOGICAL ADVANCEMENTS

China's robust economic growth has been accompanied by a surge in technological advancements and innovation, leading to an increased prominence of utility model patents. According to the statistics presented in Figure 1, which depicts the annual number of applications for utility model patents, it is evident that both utility model and invention patent applications increased substantially from 1985 to 2021.

Notably, the utility model patent applications grew at a much faster rate than invention patent applications during this period.[12] In 2020, the number of utility model patent applications was approximately twice as high as that of invention patent applications.[13] This striking difference demonstrates the growing popularity of utility model patents over invention patents. These statistics provide strong evidence of the increasing importance and preference for utility model patents in China's innovation landscape.

Furthermore, Figure 2, which showcases China's GDP from 1985 to 2021, clearly illustrates the country's robust economic growth, with its GDP rising from 309.49 billion in 1985 to 17.73 trillion in 2021. [14]

This simultaneous growth in China's economy and the number of patent applications reveals a correlation between China's robust economic development and the surge in technological advancements and innovation.

The growing popularity of utility model patents amid China's rapid economic growth reflects their increasing momentum in response to China's

---

[12] *See 1985 Nian – 2021 Nian Fen Guoneiwai Sanzhong Zhuanli Shouquanliang Tongjibiao* (1985年-2021年分国内外三种专利授权量统计) [*Statistics Table of Three Types of Patent Grants, Domestic and Overseas, from 1985 to 2021*], CHINA NAT'L. INTELL. PROP. ADMIN., https://www.cnipa.gov.cn/module/download/downfile.jsp?classid=0&showname=2-1%20%E5%88%86%E5%9B%BD%E5%86%85%E5%A4%96%E4%B8%89%E7%A7%8D%E4%B8%93%E5%88%A9%E6%8E%88%E6%9D%83%E9%87%8F%E7%BB%9F%E8%AE%A1%E8%A1%A8.xls&filename=5b5496d211be4bd68c29872e1f7dc79e.xls [https://perma.cc/2SCG-QHU6].

[13] *Id.*

[14] *GDP (Current US$) – China*, WORLD BANK GRP., https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=CN [https://perma.cc/32NG-DWE7].

innovation and technological advancements surge. This trend underscores their significance in fostering technological advancement and innovation. The faster growth rate of utility model patent applications highlights China inventors' proactive approach and their recognition of utility model patents' benefits and effectiveness in protecting their inventions. These data demonstrate the importance of utility model patents as a valuable tool in China's innovation ecosystem and showcase their contribution to the country's technological advancements and economic growth.

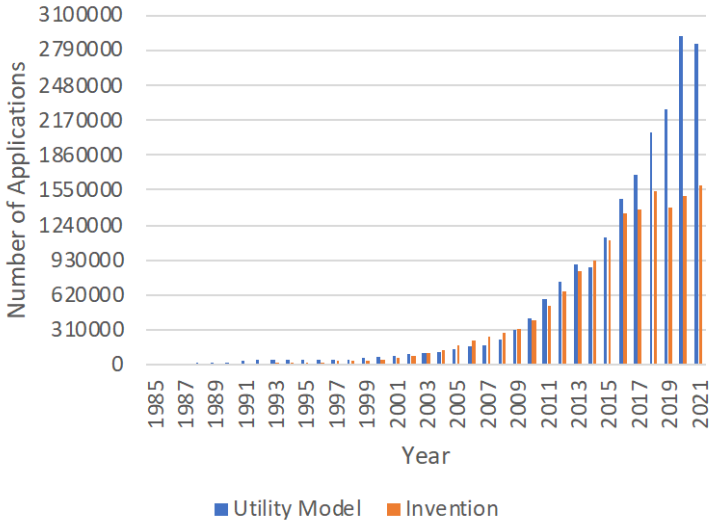


**Figure 1. Number of Patent Applications per Year**

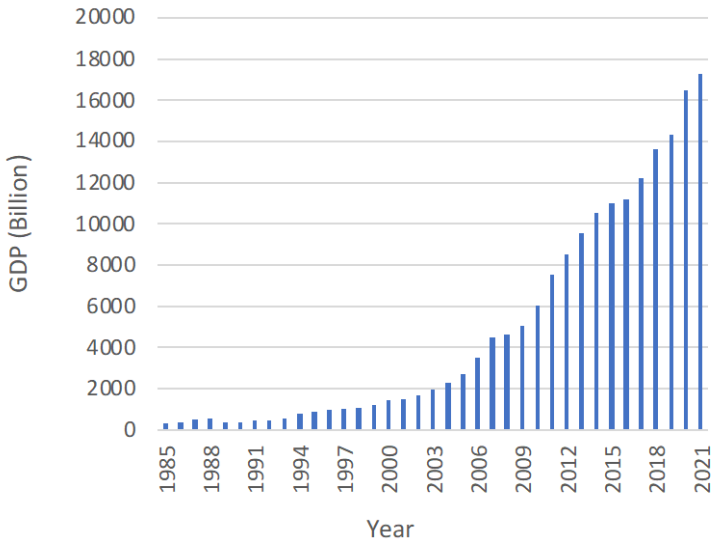


**Figure 2. Gross Domestic Product per Year**

## III. THE ROLE OF UTILITY MODELS IN CHINA'S INNOVATION ECOSYSTEM: EMPOWERING MICRO AND SMALL ENTERPRISES

Implementing China's first patent law in 1985 marked a significant milestone in its efforts to modernize its legal framework to foster innovation and technological advancement.[15] The popularity of utility model patents reflects the government's incentives for these types of innovations and its efforts to create an environment conducive to their protection and commercialization, similar to the invention patents. However, the prominence of utility model patents can be attributed to several factors that make them attractive to Chinese inventors, including China's economic and developmental contexts.

[15] Ministry of Commerce People's Rep. of China, *Patent Law Revolution: China's 40-year Journey from Adaptation to Advancement*, INTELL. PROP. PROTECTION IN CHINA (Apr. 30, 2025) http://chinaipr.mofcom.gov.cn/article/centralgovernment/202504/1991490.html [https://perma.cc/N8FE-YKUK].

### A. CHINA'S ECONOMIC STATUS FROM 1985 TO 2021

China, as a developing country, had a GDP per capita of $294.5 in 1985, according to data from the World Bank, ranking 147 among 168 countries in statistics.[16] Over the years, China's economy experienced significant growth, with its GDP per capita rising to $12,617.5 in 2021, ranking sixty-four among the countries. However, in comparison to the United States, China's economy still lags far behind. In 1985, the United States had a GDP per capita of $18,236.8, a staggering 61.92 times greater than China's.[17] In 2021, the United States's GDP per capita increased to $71,318.3,[18] an amount approximately 5.65 times higher than China's.

### B. THE CRUCIAL ROLE OF SMALL AND MICRO ENTERPRISES (SMES) IN CHINA'S TECHNOLOGICAL ADVANCEMENT AND THEIR RESOURCE LIMITATIONS

Medium, small, and micro enterprises (MSMEs) play a crucial role in China's innovation. According to 2018 statistics, MSMEs accounted for about 99.8 % of the total number of enterprises in the country, with small enterprises comprising 13.2 % and micro enterprises comprising 85.3 %.[19] These enterprises achieved over seventy percent of the total number of patents completed in the country.[20] Small and micro enterprises (SMEs) completed sixty-five percent of the

---

16 *See DataBank – World Development Indicators*, WORLD BANK GRP. (Jan. 28, 2025), https://databank.worldbank.org/reports.aspx?source=2&series=NY.GDP.PCAP.CD&country= [https://perma.cc/H9P6-XB6B].

17 *See id.*

18 *Id*.

19 *Zhongxiaowei Qiye Chengwei Tuidong Jingji Fazhan de Zhongyao Liliang — Disici Quanguo Jingji Pucha Xilie Baodao Zhi Shier* (中小微企业成为推动经济发展的重要力量——第四次全国经济普查系列报告之十二)

[*Small and Medium-sized Enterprises (SMEs) Becoming an Important Force in Driving Economic Development—The Twelfth Report in the Series of the Fourth National Economic Census*], NAT'L BUREAU OF STAT. OF CHINA (Dec. 18, 2019), http://www.stats.gov.cn/sj/zxfb/202302/t20230203_1900574.html [https://perma.cc/K4M6-KBZD].

20 *70% Yishang de Faming Zhuanli Laizi Zhongxiaowei Qiye* (70%以上的发明专利来自中小微企业) [*Over 70% of Invention Patents Come from Small and Medium-Sized Enterprises (SMEs)*], XINHUAWANG (新华网) [XINHUANET ] (Nov. 30, 2017),

patents and over eighty percent of new product development.[21] This highlights the vital role of SMEs in driving innovation and technological advancements in China.

However, SMEs may not possess sufficient financial, facility, and human resources to attain the research and development intensity required for obtaining invention patents. The inventions made by many MSMEs around 1985 were technically low, and the majority of the innovative outputs were small, incremental inventions.[22] Though these small inventions were not as inventive as invention patents, they contributed to the technological, economic, and societal advancement of the country and should be given appropriate protection.[23] China's utility model patent system was established precisely to protect these types of inventions.[24]

### C. THE ACCESSIBILITY, EXPEDITED GRANTING PROCESS, AND COST-FFFECTIVENESS OF UTILITY MODEL PATENTS HAVE MADE THEM AN ATTRACTIVE OPTION FOR MSES AND INDIVIDUAL INNOVATORS

Utility models have certain advantages in China's context. Both utility model and invention patents give patentees single-source control over their inventions. An issue with the single-source control involves its perverse effect on the rate of invention because it allows the patentees to dominate a range of technologies that may not have been discovered yet.[25] Prior to patent grants, the costs and potential benefits associated with uncovering unknown technology

---

http://finance.people.com.cn/n1/2017/1130/c1004-29676708.html [https://perma.cc/KDS9-P59U].

21 *Yanghang Hangzhang Yigang: Kuoda Xiaowei Qiye Daikuan Toufang* (央行行长易纲：扩大小微企业贷款投放) [*Central Bank Governor Yi Gang: Expanding Loans for Small and Micro Enterprises*], MEIRI JINGJI XINWEN (每日经济新闻) [EVERYDAY ECON. NEWS] (June 29, 2018), https://baijiahao.baidu.com/s?id=1604621509608388018&wfr=spider&for=pc [https://perma.cc/Z47W-ZNNW].

22 *Development of China's Utility Model Patent System*, CHINA NAT. INTELL. PROP. ADMIN. (Jan. 5, 2013), https://english.cnipa.gov.cn/art/2013/1/5/art_1340_81044.html [https://perma.cc/KZB9-5HCD].

23 *Id.*

24 *Id.*

25 CARL R. MOY, MOY'S WALKER ON PATENTS § 1:35 (4th ed. 2023).

influence inventive efforts. Once the patent is granted, any newly discovered technology within the controlled field becomes legally unusable unless the later inventor obtains permission from the patent owner.[26] Consequently, the patent grant typically reduces the motivation to invent within the controlled field for everyone except the patent owners themselves.[27]

Utility models, on the other hand, partially address the issue of single-source control by having a significantly shorter lifespan of ten years (five years before 1992 in China), in contrast to the twenty-year duration (fifteen-year duration before 1992 in China) of invention patents in China.[28] Their shorter term has a much less market-distorting impact as the innovation-to-market process usually takes several years after utility models are granted patent protection. This shorter duration enables society to engage in rapid technological advancement, aligning with the fast-paced nature of China's industrial innovation landscape, ultimately fostering a dynamic and innovative environment.

Unlike trade secrets that keep ideas confidential, utility model patents require public disclosure of the invention in exchange for patent exclusivity.[29] This disclosure helps society accumulate knowledge and facilitates further inventive activity, thereby promoting the advancement of technologies. China has been actively promoting innovation and technological development as drivers of economic growth.[30] The utility model system aligns with this strategy by encouraging incremental innovations and improvements, which are often the building blocks of more significant technological advancements.

One key advantage of utility model patents is their cost-effectiveness compared to invention patents.[31] The associated fees for utility model patent applications and maintenance are typically much lower, making them much more affordable, especially for micro and small-sized enterprises (MSEs) and individual

---

[26] *Id*.

[27] *Id*.

[28] *See Development of China's Utility Model Patent System*, *supra* note 22; DU WEIKE & HE JUAN, AN INTERNATIONAL GUIDE TO PATENT CASE MANAGEMENT FOR JUDGES § 4.1.1.2.

[29] *See* Patent Law, *supra* note 9, arts. 26, 34.

[30] *"Science and Technology are Primary Productive Forces" in 1988*, CHINA DAILY (Oct. 30, 2008), https://www.chinadaily.com.cn/bizchina/2008-10/30/content_7169055.htm [https://perma.cc/5CZA-YNYL].

[31] Hans-Peter Brack, *Utility Models and Their Comparison with Patents and Implications for the US Intellectual Property Law System*, 2009 B.C. INTELL. PROP. & TECH. F. 1, 7–8 (2009).

inventors with limited resources.[32] This cost-effectiveness encourages inventors to pursue utility model patents for their innovations in China.

Utility models also offer an expedited granting process and high grant rates. Compared to invention patents, utility model patent applications are typically granted much faster, often well within one year.[33] This accelerated timeline is particularly advantageous for inventors who wish to secure protection for their inventions and bring their products to market quicker. Additionally, utility model patent applications undergo less rigorous governmental scrutiny compared to invention patent applications.[34] As a result, the granting rate for utility model patent applications is much higher than invention patent application.[35] This higher grant rate makes utility model patents more accessible to inventors, particularly those having limited financial resources.

Overall, the prominence of utility model patents in China's patent landscape demonstrates their effectiveness in supporting innovation. Their accessibility, faster-granting process, and cost-effectiveness have made them a preferred option for inventors, especially MSEs and individual innovators. As China continues prioritizing innovation and technological advancements, utility model patents are expected to remain a significant part of its patent ecosystem, contributing to innovation-driven growth.

## IV. CHINA'S UTILITY MODEL SYSTEM: LEGAL FRAMEWORK AND ADAPTIVE TO ECONOMIC AND DEVELOPMENTAL CONTEXTS

China's legal framework for utility model patents has undergone significant experimentation and adaptation in response to the country's unique economic and developmental contexts.[36] Since its enactment in 1984, China patent law has been amended four times: first in 1992 (hereinafter "1992 Amendment"),

---

[32] *Id.* at 8–9.

[33] Phil (Boyang) Yu, *The Utility Model System in China*, LINDA LIU & PARTNERS (June 24, 2021), https://www.lindapatent.com/en/info/insights_podcasts/2020/0220/1032.html [https://perma.cc/P5A8-QY99].

[34] *Id*.

[35] *Id.*

[36] WIPO, AN INTERNATIONAL GUIDE TO PATENT CASE MANAGEMENT FOR JUDGES 107 (2023), https://www.wipo.int/edocs/pubdocs/en/wipo-pub-1079-en-an-international-guide-to-patent-case-management-for-judges.pdf [https://perma.cc/8XPV-AZZH] [hereinafter AN INTERNATIONAL GUIDE TO PATENT CASE MANAGEMENT FOR JUDGES].

then in 2000 and 2008 (hereinafter "2008 Amendment"), and latest in 2020 (hereinafter "2020 Amendment").[37]

### A. SUBJECT MATTER OF CHINA'S UTILITY MODEL PATENT: SHAPE AND/OR STRUCTURE OF A PRODUCT

It is important to note that not every incremental invention can be protected through utility model patents. The eligible subject matters for utility model patents vary among different countries. For instance, in Germany, utility model patents offer broad protection of any inventions except those relating to processes and biotechnological inventions.[38] In Japan and South Korea, utility model patents specifically cover the protection of devices related to their shape, construction/structure, or a combination thereof.[39]

In China, utility model patents protect new technical solutions related to the shape and/or structure of a product, provided they are fit for practical use, as stipulated in Article 2 of the China Patent Law.[40] However, there are certain exclusions where utility model patents do not offer protection. These exclusions include: (i) merely decorative features, for example, purely ornamental or decorative aspects of a product; (ii) compositions of matter; (iii) methods, processes, or improvement thereof; or (iv) a product without a definite shape, for example, materials in a powdered or liquid state.[41]

---

37 *Id*.

38 *See* John Richards, *Utility Model Protection Throughout the World*, INTELLECTUAL PROPERTY OWNERS ASSOC. (2010), https://ipo.org/wp-content/uploads/2013/03/Utility_Model_protection.pdf [https://perma.cc/A4ML-ATR2].

39 *Utility Models*, JAPAN PAT. OFF., https://www.jpo.go.jp/e/faq/yokuaru/utility.html [https://perma.cc/6WJZ-AQCD]; *Utility Models*, KOR. INTELL. PROP. OFF., https://www.kipo.go.kr/en/HtmlApp?c=92001&catmenu=ek03_01_02 [https://perma.cc/6SUN-GC36].

40 Patent Law, *supra* note 9, art. 2.

41 GUOJIA ZHISHI CHANQUAN JU ZHINAN (国家知识产权局 制定) [CHINA NAT'L INTELL. PROP. ADMIN.], ZHUANLI SHENCHA ZHINAN (专利审查指南) [PATENT EXAMINATION GUIDELINES] pt. 1, ch. 2, §§ 6.1–6.3 (2024) https://www.cnipa.gov.cn/module/download/downfile.jsp?filename=da9d262dfdfa4b9d82910c98cc3b7cbd.pdf&classid=0&showname=%E4%B8%93%E5%88%A9%E5%AE%A1%E6%9F%A5%E6%8C%87%E5%8D%97.pdf [https://perma.cc/7GUG-8K7M] [hereinafter CHINA PATENT EXAMINATION GUIDELINES]; *Protecting IP in China: The Utility Model Opportunity*, OYEN

Thus, a utility model patent in China only protects the shape and/or structure of a product, which is typically visible and exposed to the public once the product is available in the market. Utility model patents seem designed to protect incremental inventions that cannot be protected as trade secrets. This means that inventors in China can use utility model patents to protect the physical design or configuration of a product, while incremental improvement in processes and formulations can be safeguarded as trade secrets. Notably, China is one of the world's largest manufacturers, accounting for a significant portion of global manufacturing output each year.[42]

### B. CRITERIA AND EXAMINATION OF CHINA'S UTILITY MODEL PATENTS

Utility models cover a specific range of inventive activities that may not meet invention patent requirements. Article 22 of China Patent Law stipulates that utility model and invention patents must meet the novelty, inventiveness, and utility requirements.[43] Both types of patents share the same standard for novelty and utility.[44] However, utility model patents have a lower inventiveness threshold than invention patents. "Inventiveness" for an invention patent requires prominent substantive features and represents notable progress in the field.[45] On the other hand, "inventiveness" for a utility model patent only requires substantive features and represents progress without reaching the same level of notable progress.[46] Thus, utility model patents only require some degree of technological advancement over the prior art.

It is important to note that a utility model patent application does not need to fully meet all the requirements of Article 22 before being granted a patent.[47] Article 40 of the China Patent Law allows the China National Intellectual Property

---

WIGGS GREEN & MUTALA LLP (July 9, 2019) https://patentable.com/protecting-ip-china-utility-model-opportunity/ [https://perma.cc/H7QU-5DW5].

42 Bruno Venditti, *Ranked: Global Share of Manufacturers by Country*, VISUAL CAPITALIST (May 2, 2025), https://www.visualcapitalist.com/ranked-global-share-of-manufacturing-value-by-country/ [https://perma.cc/3ZX7-VDJR].

43 Patent Law, *supra* note 9, art. 22.

44 *Id.*

45 *Id.*

46 *Id.*

47 *Id.* arts. 22, 34, 40.

Administration (CNIPA) to grant a patent to a utility model if there are no grounds for rejection after a preliminary examination.[48]

The substantive examination of a utility model patent application is traditionally postponed until the associated patent rights are challenged or enforced. Article 66 of the China Patent Law prescribes that courts or intellectual property administrative authorities may request a Utility Model Patentability Evaluation Report (UMPER) on the validity of the claims as evidence in utility model patent infringement lawsuits or invalidity proceedings.[49] This evaluation report aims to prevent the abuse of the patent right and encourages public inspection.

To prevent the abuse of utility model patents, the UMPER reports are also required by the General Administration of China Customs to proactively suspend imports and exports of infringing goods.[50] Additionally, administrative enforcement departments may use UMPER reports to remove infringing products from e-commerce websites.[51] These measures aim to ensure the proper use and enforcement of utility model patents, prevent abuse, and encourage transparency and public scrutiny of these patents.

Thus, Chinese utility model patent applications undergo a two-stage examination process.[52] The first stage is a preliminary examination, and the second stage is a post-grant substantive examination.[53] Prior to 2017, the first stage focuses on formalities, and the second stage evaluates substantive matters including novelty and inventiveness.[54] Starting in 2017, the CNIPA began giving the first stage increased scrutiny, issuing rejections for novelty, lack of enablement, lack of

---

48 *Id.* art. 40.

49 Patent Law, *supra* note 9, art. 66.

50 Kim Lu, *China to Relax Eligibility of Requestor for Evaluation Reports of Utility Model and Design Patent*, CHANG TSI & PARTNERS: CHANG TSI INSIGHTS (Feb. 15, 2022), https://www.changtsi.com/news/insight/1853.html [https://perma.cc/6LZ4-X73R].

51 *Id.*

52 Daniel Gajewski, *Utility Model Examination in China is Quietly Changing*, IPWATCHDOG: GUEST CONTRIBUTORS (July 28, 2019), https://ipwatchdog.com/2019/07/28/utility-model-examination-china-quietly-changing/id=111451/ [https://perma.cc/7HXY-XYZ3].

53 *Id.*

54 *Id.*

support, and ineligible subject matter, in addition to more mundane formal issues.[55]

The results of the second stage examination led to the issuance of the UMPER.[56] It is important to note that the second-stage examination is optional, and applicants are not obliged to request it.[57] Prior to the implementation of the 2020 Amendment on June 1, 2021, only the patentee and interested parties, such as a recorded exclusive licensee or a licensee with the right to sue, were allowed to request CNIPA to conduct the post-grant substantive examination and provide the UMPER.[58] However, since June 1, 2021, potential or accused infringers in civil patent litigation or administrative enforcement cases can also request a UMPER on their initiative.[59] This change, introduced by the 2020 Amendment, has made the patent evaluation report system more comprehensive and impartial in its procedures. It also provides accused infringers with an additional mechanism to address cease-and-desist letters or allegations of infringement.[60] These developments in the patent evaluation report system aim to enhance the fairness and effectiveness of utility model patent protection in China and provide parties involved in patent disputes with more avenues for resolution and defense.

### C. Dual Filing Under China Patent Law: Utility Model and Invention Patent Strategies and Limitations

According to Article 9 of China Patent Law, an applicant can file both an invention patent application and a utility model patent application for the same invention on the same day.[61] However, only one patent can ultimately be granted for a particular invention.[62] This restriction was introduced in the 2008 Amendment, stating that the same invention can only be granted one patent at any given time.[63]

---

55 *Id*.

56 *Id.*

57 *Id.*

58 Lu, *supra* note 50.

59 *Id.*

60 *See id.*

61 Patent Law, *supra* note 9, at art. 9.

62 *Id.*

63 An International Guide to Patent Case Management for Judges, *supra* note 36, at 108.

The utility model patent application typically receives a faster grant compared to the invention patent application. If the invention patent application is later granted, the applicant must abandon the utility model patent application in favor of the invention patent under Article 9 of China Patent Law.[64] The invention patent will then protect the same invention that the utility model patent initially covered.

Thus, Article 9 of China Patent Law encourages applicants to file both types of applications for the same invention, as it allows them to retain utility model patent protection if the invention patent application failed to meet the inventiveness requirements.[65]

The utility model patent has a duration of ten years, which is half the duration of the invention patent's term, which is twenty years.[66] Since the duration of both patents starts from the same filing date, even if the applicant successfully obtains both patents, it does not result in an extended period of protection compared to filing the invention patent application alone.

However, suppose the applications for an invention patent and a utility model patent are filed on different days or have different priority dates. In that case, the earlier-filed application or the application having an earlier priority date will be considered as prior art against the later-filed application. This is because China Patent Law does not provide prior art exceptions for the inventors' prior applications or commonly owned applications, unlike U.S. patent law.[67] As a result, double patenting or concurrent forms of protection for the same invention are not permitted under the China Patent Law.[68]

### D. ENFORCEMENT AND INFRINGEMENT DAMAGES OF UTILITY MODEL PATENTS IN CHINA

In litigation, utility model patents undergo the same type of infringement analysis and claim construction and have the same available injunctive relief as

---

64 Patent Law, *supra* note 9, art. 9.

65 Aaron Wininger & Jingyuan Nan, *Utility Model Patents: An Overlooked Chinese IP Right*, CHINA IP L. UPDATE (Nov. 28, 2019), https://www.chinaiplawupdate.com/2019/11/utility-model-patents-an-overlooked-chinese-ip-right/ [https://perma.cc/GSB5-CZKH].

66 Patent Law, *supra* note 9, art. 42.

67 *Id.* art. 22

68 *Id.* art. 9.

invention patents.[69] Utility model patents also share substantially the same enforcement mechanisms as invention patents in China.[70]

In terms of infringement damage, similar to the United States, the compensation for patent infringement in China is determined based on either the actual losses suffered by the patent holder due to the infringement or the benefits gained by the infringer as a result of the infringement.[71] When these are hard to determine, a reasonable multiple of the patent licensing fee may serve as a benchmark.[72] When determining losses, gains, and patent licensing fees is difficult, the court may award statutory damages.[73]

The 2020 Amendment brought several significant changes to the calculation of the damage caused by infringement.[74] Notably, it increased the range of statutory damages from RMB 10,000 to RMB 1,000,000 to a new range of RMB 30,000 to RMB 5,000,000, taking into account factors such as the type of patent, the nature of the infringement, and the surrounding circumstances.[75]

Additionally, the 2020 Amendment introduced punitive damages for willful infringements under severe circumstances; these damages permit up to five times the amount determined based on the actual loss suffered by the patent holder, the gains of the infringer, or the patent licensing fee.[76]

Furthermore, in cases where the patent holder has made every reasonable effort to provide evidence but the relevant books or records related to the infringing act are held by the infringer, the court may order the infringer to

---

69 Wininger & Nan, *supra* note 65.

70 Li et al., *Brief Introduction of Utility Models*, IAM (Dec. 2, 2022), https://www.iam-media.com/guide/global-patent-prosecution/2023/article/brief-introduction-of-um [https://perma.cc/9XYX-6KCV].

71 Patent Law, *supra* note 9, art. 71.

72 *Id.*

73 *Id.*

74 Defeng Song, *Understanding the Fourth Amendment of Chinese Patent Law*, FIELDFISHER (July 27, 2021), https://www.fieldfisher.com/en/locations/china/insights/understanding-the-fourth-amendment-of-chinese-patent-law [https://perma.cc/GZT9-MZWV]; Patent Law, *supra* note 9, art. 71.

75 Patent Law, *supra* note 9, art. 71.

76 *Id.*

provide the relevant books and records.[77] If the infringer fails to provide or provides false books and records, the court may determine the compensation amount based on the patent holder's claims and evidence.[78] The compensation amount should also include the reasonable expenses incurred by the patent holder in taking measures to stop the infringement.[79]

The 2020 Amendment also extended the statute of limitation for patent infringement lawsuits from two years to three years.[80]

### E. Adaptation of Utility Model Patents to the Manufacturing Sector and Associated Challenges

China's utility model system has evolved to meet the needs of its economy and industrial sectors. As a rapidly growing economy with a vast manufacturing sector, China has witnessed a surge in innovation and technological advancements. The utility model system has been tailored to accommodate the needs of MSEs and individual inventors who often lack the resources and time for standard invention patent applications.

While China's experiment with utility model patents has yielded positive outcomes, it is not without its challenges. One of the main concerns is maintaining the balance between encouraging innovation and preventing abuse. There have been instances of utility model patents being abused or misused for anti-competitive practices or blocking innovation.[81]

## V. China's Efforts in Improving Quality and Integrity of Utility Models: Legislations and Quality Enhancement Measures

China's utility model system has faced criticism for issuing a considerable number of low-quality utility model patents.[82] These utility model patents have a relatively high rate of invalidation, estimated to be over fifty percent.[83] This

---

77 *Id.*

78 *Id.*

79 *Id.*

80 Song, *supra* note 74; Patent Law, *supra* note 9, art. 74.

81 Li et al., *supra* note 70.

82 Gajewski, *supra* note 52.

83 *Id.*

situation can be attributed, at least in part, to the historical lack of substantive examination before the utility model patents are granted.[84]

### A. Expanding the Scope of the Preliminary Examination to Include Substantive Defects Concerning Inadequate Enablement, Insufficient Support, Ineligible Subject Matter, Novelty, and Inventiveness Assessments

In response to public concerns regarding utility model patents' quality and potential abuse, CNIPA increased scrutiny of utility model patent applications in 2017.[85] This scrutiny led to revisions in the Patent Examination Guidelines, which expanded the scope of preliminary examination to address obvious substantive defects, including novelty. As a result, the CNIPA now frequently issues rejections for various reasons, such as lack of novelty, inadequate enablement, insufficient support, and ineligible subject matter, in addition to routine formalities.[86]

The dramatic increase in the filings of utility model patent applications, which reached a record 2.927 million in 2020, may have influenced regulatory change.[87] In 2021, the CNIPA proposed revising its Examination Guidelines to require examiners to assess whether an application for a utility model patent obviously lacks inventiveness during the preliminary examination.[88] In 2022, the CNIPA published an official letter in response to recommendations from the Thirteenth National People's Congress and the Thirteenth National Committee of the Chinese People's Political Consultative Conference (CPPCC) concerning malicious competition and abuse of problematic utility model patents in the lithium battery industry.[89] The CNIPA emphasizes its intent to incorporate the

---

84 *Id.*

85 *Id.*

86 *Id.*

87 Aaron Wininger et al., *CNIPA's Draft Patent Examination Guidelines – What Is Coming Down The Pipeline?*, China IP L. Update (Jan. 3, 2022), https://www.chinaiplawupdate.com/2022/01/cnipas-draft-patent-examination-guidelines-what-is-coming-down-the-pipeline/ [https://perma.cc/MF2F-H4F3].

88 *Id.*

89 *Guojia Zhishi Chanquan Ju Dui Shisanjie Quanguo Renda Diwuci Huiyi Di 8842 Hao JIanyi Dafu de Han* (国家知识产权局对十三届全国人大五次会议第8842号建议答复的函) [*Letter of the State Intellectual Property Office in Response to the Recommendation No. 8842 of the Fifth Session of the Thirteenth National People's*

"obviously lack of inventiveness" standard into the scope of the preliminary examination to improve the quality of utility model patents in these letters.[90]

The revised Examination Guidelines, effective in 2024, adopt the proposed revisions and stipulate the criteria for evaluating inventiveness.[91] This evaluation standard is the same one used in invalidation proceedings.[92] By incorporating this evaluation into the preliminary examination, the CNIPA aims to enhance the examination process and ensure that utility model patents with an obvious lack of inventiveness are not granted. Regarding the search for prior art references, the revised Examination Guidelines instruct examiners to concentrate on the technical field to which the utility model patent application belongs.[93] However, suppose there is a clear technical teaching in the prior art that would prompt a person skilled in the relevant art to seek technical means in a proximate or relevant technical field. In that case, the Examination Guidelines allow consideration of references from the proximate or relevant field.[94]

### B. INCORPORATING GOOD FAITH ASSESSMENTS INTO ALL APPLICATION STAGES TO COUNTER IRREGULAR OR ABNORMAL APPLICATIONS

In 2020, China revised the Patent Law to include Article 20, which states, "the principle of good faith shall be followed in applying for patents and

---

*Congress*], CHINA NAT'L INTELL. PROP. ADMIN. (July 20, 2022), https://www.cnipa.gov.cn/art/2022/7/22/art_516_176743.html [https://perma.cc/9Y96-QUTS]; *Guojia Zhishi Chanquan Ju Guanyu Zhengxie Shisanjie Quanguo Weiyuan Diwuci Huiyi Di 03510 Hao (Kexue Jishu Lei 160 Hao) Tian Dafu de Han* (国家知识产权局关于政协十三届全国委员会第五次会议第03510号（科学技术类160号）提案答复的函) [*Letter of the State Intellectual Property Office in Response to the Proposal No. 03510 (No. 160 of Science and Technology) of the Fifth Session of the Thirteenth National Committee of the Chinese People's Political Consultative Conference*], CHINA NAT'L INTELL. PROP. ADMIN. (Aug. 29, 2022), https://www.cnipa.gov.cn/art/2022/9/6/art_516_178500.html [https://perma.cc/DH7K-GEAL].

90 *Id.*

91 CHINA PATENT EXAMINATION GUIDELINES, *supra* note 41, pt. 1, ch. 2, § 11, pt. 4, ch. 6, § 4.

92 Wininger et al., *supra* note 87.

93 CHINA PATENT EXAMINATION GUIDELINES, *supra* note 41, pt. 4, ch. 6, § 4.1.

94 *Id.*

exercising patent rights."[95] In 2021, the Supreme People's Court of China issued a judicial interpretation confirming that the courts could invalidate patents if the applicant violated the principle of good faith.[96] The Proposed Amendment to the Implementing Regulations of the Patent Law of the People's Republic of China stipulates that actions such as fabrication, forgery, plagiarism, piecing together, or any similar misconduct are considered violations of the principle of good faith as outlined in Article 20 of the Patent Law.[97] "The CNIPA has also introduced new screening as part of its effort to weed out irregular or abnormal applications, in other words, bad-faith applications."[98] The CNIPA issued the Measures on Regulating the Conduct of Patent Application in 2021.[99] In the Measures, the CNIPA listed applications that have "fabricated, forged or altered the content of invention, experimental data or technical effects, or plagiarized, simply replaced, pieced together the existing technology or existing design and other similar situations" as abnormal patent applications.[100] According to the Measures, the CNIPA reported four batches of 815000 abnormal patent applications to local

95 Patent Law, *supra* note 9, art. 20; Song, *supra* note 74.

96 *Judgment Digests of the Intellectual Property Court of the Supreme People's Court (2020)*, INTELL. PROP. CT. OF THE SUP. PEOPLE'S CT, OF CHINA (Apr. 26, 2021), https://enipc.court.gov.cn/en-us/news/view-1225.html [https://perma.cc/36UB-9LLU].

97 Zhuanli Fa Shishi Xize Xiugai Jianyi (Zhengqiu Yijian Gao) (专利法实施细则修改建议(征求意见稿)) [Proposed Amendments to the Implementing Regulations of the Patent Law (Draft for Public Consultation)] (Nov. 27, 2020), China Nat'l Intell. Prop. Admin., https://www.cnipa.gov.cn/art/2020/11/27/art_75_155294.html [https://perma.cc/Z99S-KG88].

98 Wininger et al., *supra* note 87.

99 Guanyu Guifan Shenqing Zhaunli Xingwei de Banfa Jiedu (关于规范申请专利行为的办法解读) [Measures for Standardizing Patent Application Conduct] (Mar. 31, 2021), CHINA NAT'L INTELL. PROP. ADMIN., https://www.cnipa.gov.cn/art/2021/3/31/art_66_158145.html [https://perma.cc/7Q6U-7GBA].

100 Guanyu Guifan Shenqing Zhuanli Xinwei de Banfa(关于规范申请专利行为的办法) [Measures for Standardizing Patent Application Conduct] (promulgated by the China Nat'l. Intell. Prop. Admin. Mar. 11, 2021), art. 2, § 1(ii), https://www.gov.cn/zhengce/zhengceku/2021-03/13/content_5592724.html [https://perma.cc/ZYC2-8TEB].

authorities with a more than ninety percent withdrawal rate in 2021.[101] The CNIPA also released a Draft Amendment to the Examination Guidelines (Consultation Draft) to provide a new preliminary examination process:

> During the preliminary examination, the examiner shall refer to the provisions of Chapter 1, Section 5 of Part II of these Guidelines to examine whether the conduct in the prosecution of patent application obviously violates the principle of good faith.[102]

In December 2023, China's State Council amended the Implementing Regulations of the Patent Law to include Article 11, which implements Article 20 of the Patent Law.[103] This article stipulates that patent applications must be made in good faith, with genuine inventive activities as the foundation, and prohibits fraudulent practices.[104]

In alignment with this, the CNIPA issued regulations to enforce Article 11, requiring patent applicants and their agents to act in good faith, base their applications on true innovation, and refrain from fraudulent activities.[105]

The CNIPA also revised the Examination Guidelines to establish the requirement of good faith throughout all stages of the patent application process, including filings, preliminary examination, substantive examination, and

---

101 *China's IP Undertakings Reviewed in 2021*, CHINA NAT'L INTELL. PROP. ADMIN. (Jan. 19, 2022), https://english.cnipa.gov.cn/art/2022/1/19/art_2829_172826.html [https://perma.cc/V3JY-UFHZ]; Crystal Dou, *The IP Related Statistics in 2021 and the Latest Trend in Chinese Patent Examination*, LINDA LIU & PARTNERS (Mar. 16, 2022), https://www.lindapatent.com/en/info/insights_podcasts/2022/0329/1639.html [https://perma.cc/AL2R-K2J5].

102 Wininger et al., *supra* note 87.

103 Zhuanli Fa Shishi Xize (专利法实施细则) [Implementing Regulations of the Patent Law] (promulgated by St. Council Dec. 11, 2023), art. 11, https://www.cnipa.gov.cn/art/2023/12/21/art_98_189197.html [https://perma.cc/V9UR-25D3]; Patent Law, *supra* note 9, at art. 20.

104 *Id.*

105 Guifan Shenqing Zhuanli Xingwei de Guiding (规范申请专利行为的规定), [Regulations for Standardizing Patent Application Conduct] (promulgated by China Nat'l. Intell. Prop. Admin., Mar. 11, 2021), art. 3. https://www.cnipa.gov.cn/art/2023/12/21/art_2790_189475.html [https://perma.cc/TE6A-6BLL].

invalidation proceedings.[106] The revised Examination Guidelines specify that a patent application may be rejected if it violates the principle of good faith by engaging in fraudulent activities without a genuine basis in the actual invention.[107]

The good faith requirement in patent applications also helps counter irregular activities driven by incentives that may not be available to foreign applicants. The intention is to promote fairness, integrity, and equal opportunities in the patent system.

According to the CNIPA's regulations, the abnormal patent application activities include, but are not limited to, the following[108]:

- Identical or Composite Patent Applications: submitting multiple patent applications that are clearly identical in content or are essentially formed by a simple combination of different features or elements from different inventions.

- Fabricated, Plagiarized, or Patchwork Data: submitting patent applications where the experimental data or technical effects have been fabricated, plagiarized, or are mere replacements or patchworks of existing technologies.

- Inconsistency with research and resources: submitting patent applications for inventions without actual R&D activities and failing to provide a reasonable explanation.

- Other Irregular Behaviors: Engaging in other irregular patent application-related behaviors that violate the principle of good faith and disrupt the normal order of patent work.

The following procedure is typically followed when an application is flagged as being in bad faith.[109] The examiner will issue an examination opinion notice to the applicant, explaining the reasons for the bad faith determination. The

---

[106] Wei Pan & Junjie Zhang, *China: Fresh Rules and Guidelines to Enhance IP Protection Amid Filing Surge*, IAM (Sep. 23, 2024), https://www.iam-media.com/review/the-patent-prosecution-review/2025/article/china-fresh-rules-and-guidelines-enhance-ip-protection-amid-filing-surge [https://perma.cc/7HD2-LAWD]

[107] CHINA PATENT EXAMINATION GUIDELINES, *supra* note 41, pt. 2, ch. 8, § 6.1.2; Wininger et al., *supra* note 87.

[108] Implementing Regulations of the Patent Law, *supra* note 103, art. 3.

[109] Wininger et al., *supra* note 87.

applicant will be notified and given a specified time limit to provide their opinion.[110] The applicant must state their opinion within the specified time limit, addressing the concerns raised by the examiner.[111] They can present arguments, provide evidence, or offer explanations to counter the bad faith allegations. If the applicant fails to reply within the specified time limit, the examiner will issue a notice of deemed withdrawal.[112] This means that the application will be considered withdrawn due to the lack of response from the applicant. After considering the applicant's opinions, if provided, the examiner will make a decision on the application.[113] In cases where bad faith is established, the decision is typically a rejection of the application.[114]

"Even if a patent application successfully passes the preliminary examination, the principle of good faith will continue to be considered during the substantive examination."[115] "According to Article 20(1) of the Patent Law, a patentee must not infringe upon the public interest or the legal interests of other individuals."[116] This means that beyond the preliminary examination process, the substantive examination of a patent application will also take into account whether the proposed invention aligns with the public interest and respects the legal rights of others, ensuring that it does not conflict with existing laws, regulations, or the rights of third parties.

In a patent reexamination procedure, the examiner has the authority to challenge an application that may have violated the principle of good faith.[117] If necessary, the examiner can reject the application based on this violation.[118] It is within the examiner's discretion to assess the application's compliance with the good-faith principle and take appropriate actions. Furthermore, even after a patent application is granted and a patent is issued, it remains subject to the requirement of good faith in an invalidation proceeding.[119] During an invalidation proceeding,

---

110 *Id.*

111 *Id.*

112 *Id.*

113 *Id.*

114 *See id.*

115 Wininger et al., *supra* note 87.

116 *Id.*

117 *Id.*

118 *Id.*

119 *Id.*

the patent review collegial panel has the discretionary power to review the patent and declare it invalid if there are grounds to believe that the patent violated the good-faith principle.[120] This can occur even if the petitioner does not explicitly raise the issue of bad faith filing as an argument.[121]

The good faith requirement aims to prevent irregular activities and maintain the integrity of the patent system. Promoting transparency, honesty, and adherence to ethical standards helps level the playing field for all applicants, including foreign applicants. It ensures that patents are granted based on genuine innovation and merit rather than manipulating or exploiting the system. This requirement acts as a safeguard to protect the public interest, discourage unfair advantages, and foster a more equitable and trustworthy patent environment for all participants, regardless of their origin or nationality.

### C. Impact of Legislation and Quality Enhancement Measures on Utility Model Patent Applications

These proposed revisions aim to strengthen the examination process for utility model applications and ensure that only genuinely inventive and novel inventions are granted utility model protection. Expanding the scope of the preliminary examination to include an inventiveness assessment and the requirement of good-faith compliance will likely result in a more thorough examination process and more challenging office actions.[122] The examination period for certain applications may extend to more than one year, and the average granting rate is expected to decline.[123] However, this shift in focus from quantity to quality is a positive evolution for the Chinese patent system.

In addition, procedures that were previously exclusive to invention patent applications, such as deferral of substantive examination and patent term

---

120 *Id.*

121 Wininger et al., *supra* note 87.

122 Audrey Cheung et al., *China Proposes New Examination Guidelines for Utility Models*, China Pat. Strategy (Nov. 24, 2022), https://chinapatentstrategy.com/obviously-lack-of-inventiveness-for-chinese-utility-models/ [https://perma.cc/3QSJ-SCU2]; Wininger et al., *supra* note 87.

123 Aaron Wininger, *Chinese Utility Model Grants Down 25.5% in 2023, Invention Patent Grants Up 15.4% in Shift from Quantity to Quality*, China IP L. Update (Jan. 16, 2024) https://www.chinaiplawupdate.com/2024/01/chinese-utility-model-grants-down-25-5-in-2023-invention-patent-grants-up-15-4-in-shift-from-quantity-to-quality/ [https://perma.cc/W5GH-YVAU].

adjustment, will be available for utility model patent applications.[124] These revisions demonstrate China's commitment to strengthening the utility model patent application examination process and ensuring that only high-quality utility model patent applications receive protection by aligning the examination standards for utility model patents with those of invention patents.

Thus, China has implemented measures to enhance the examination process, improve patent quality, and combat malicious practices. Stricter review standards and increased scrutiny are being applied to utility model patent applications to ensure that only genuine and deserving inventions receive protection.

As a result, the number of utility model and invention patents granted in China exhibited contrasting trends when comparing 2022 to 2021. Specifically, there was a decrease in the number of utility model patent patents granted by over 10.1 % in 2022, while the number of invention patents granted increased by almost fifteen percent[125]. This starkly contrasts with the 2021 data, where both invention and utility model patent grant rates increased by thirty-one percent.[126]

The evolution of China's patent law and guidelines in response to the rapid development of utility models exemplifies China's proactive approach to adapting its legal system to keep pace with the changing demands of its thriving economy and innovation landscape.

## VI. THE ECONOMIC AND TECHNOLOGICAL IMPACT OF UTILITY MODELS: DRIVING INNOVATION AND INDUSTRIAL GROWTH

Utility models have a significant impact on China's innovation and economy. As of 2022, the number of utility patents in force stands at 10,835,261, which is approximately 2.6 times the count of 4,212,188 invention patents in force.[127] In 2017, utility model patents accounted for around thirty percent of

---

124 Audrey Cheung et al., *supra* note 122.

125 Aaron Wininger, *Chinese Invention Patent Grants Up 14.7% in 2022 YoY; Utility Model Grants Down 10.1%*, NAT'L L. REV. (Jan. 16, 2023), https://www.natlawreview.com/article/chinese-invention-patent-grants-147-2022-yoy-utility-model-grants-down-101 [https://perma.cc/4MUH-UC3H] (showing a 10.1 % drop in utility model patents but a 14.7 % rise in invention patents).

126 *Id.*

127 *1-1 Patent Grants, and Patents in Force of Three Kinds Originated from Home and Abroad (2022)*, CHINA INTELL. PROP. STAT. YEARBOOK 2022,

patent litigation, while invention patents only accounted for about ten percent (with design patents making up the remaining sixty percent).[128] An illustrative example of the value of utility model patents can be seen in a recent case in China involving two utility model patents. In this case, the right holder was awarded a substantial amount equivalent to $12 million, highlighting the significance and potential financial rewards associated with utility model patent protection.[129]

### A. A Significant Portion of Utility Model Patents were Successfully Applied and Integrated Into Industrial Production or Commercialization

The industrialization rate of utility model patents in China has exhibited overall growth over the past six years, as shown in Figure 3 below.[130] In 2017, the

https://english.cnipa.gov.cn/jianbao/year2022/a/a1.html [https://perma.cc/DS6Q-YQYB].

128 Gajewski, *supra* note 52.

129 Thomas F. Cotter, *Chinese Court Awards $12 Million in Damages for Infringement of Two Utility Models*, Compar. Pat. Remedies (Jan. 26, 2015), http://comparativepatentremedies.blogspot.com/2015/01/chinese-court-awards-12-million-in.html [https://perma.cc/57XG-Q4DA] (highlighting another case in which a Chinese court awarded $48 million for infringement of a utility model patent; the case was later settled by the parties for $23 million).

130 Guojia Zhishi Chanquan Ju Zhanlue Guihua Si & Guojia Zhishi Chanquan Ju Zhishi Chanquan Fazhan Yanjiu Zhongxin (国家知识产权局战略规划司和国家知识产权局知识产权发展研究中心) [Nat'l Intell. Prop. Admin. Strategic Planning Dep't & Nat'l Intell. Prop. Admin. Intell. Prop. Dev. Rsch. Ctr.], 2021 Nian Zhongguo Zhuanli Diaocha Baogao (2021年中国专利调查报告) [2021 China Patent Survey Report] 25, https://www.cnipa.gov.cn/module/download/downfile.jsp?classid=0&showname=2021%E5%B9%B4%E4%B8%AD%E5%9B%BD%E4%B8%93%E5%88%A9%E8%B0%83%E6%9F%A5%E6%8A%A5%E5%91%8A.pdf&filename=e48c21fe444a4651a72901c95a763bcc.pdf [https://perma.cc/66BX-95FH] [hereinafter 2021 China Patent Survey Report]; Guojia Zhishi Chanquan Ju Zhanlue Guihua Si & Guojia Zhishi Chanquan Ju Zhishi Chanquan Fazhan Yanjiu Zhongxin (国家知识产权局战略规划司和国家知识产权局知识产权发展研究中心) [Nat'l Intell. Prop. Admin. Strategic Planning Dep't & Nat'l Intell. Prop. Admin. Intell. Prop. Dev. Rsch. Ctr.], 2022 Nian Zhongguo Zhuanli Diaocha Baogao (2022年中国专利调查报告) [2022 China Patent

industrialization rate stood at 35.6 %,[131] and by 2021, it had increased to 46.2 %.[132] The industrialization rate reflects the proportion of utility model patents successfully applied and integrated into industrial production or commercialization.[133] It indicates the extent to which these utility model patents have contributed to driving economic growth, technological advancement, and innovation within industries. The upward trend from 2017 to 2022 demonstrates the increasing translation of utility model patents into practical applications that drive industrial development and generate economic value.

While there was a slight decline in 2022, with the rate dropping to 44.9 % compared to the previous year, it is important to consider the broader context and potential factors that could have influenced this change, in particular, China expanded lockdowns as COVID-19 cases hit the daily record in 2022.[134] Various factors, including market conditions, industry-specific challenges, and macroeconomic factors, can influence the fluctuation in the industrialization rate. Overall, the increasing industrialization rate of utility model patents over the past six years highlights their significance in driving China's economy, fostering innovation, and promoting technological progress in various sectors.

SURVEY REPORT] 41, https://www.cnipa.gov.cn/module/download/down.jsp?i_ID=181043&colID=88 [https://perma.cc/67YN-2NBR] [hereinafter 2022 CHINA PATENT SURVEY REPORT].

131 2021 CHINA PATENT SURVEY REPORT, *supra* note 130, at 25.

132 *Id.*; 2022 CHINA PATENT SURVEY REPORT, *supra* note 130, at 41.

133 *See* 2022 CHINA PATENT SURVEY REPORT, *supra* note 130, at 6.

134 *Id.* at 41.

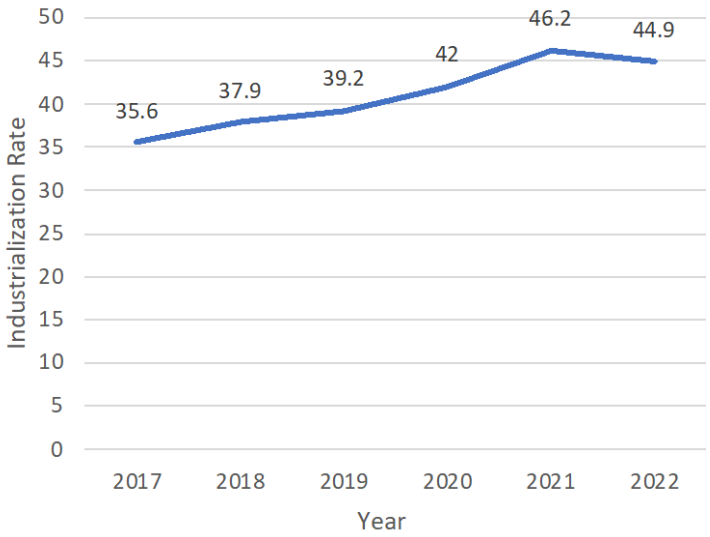


**Figure 3. 2017–2022 Utility Model Patent Industrialization Rate**

### B. A Significant Portion of Utility Model Patents Were Successfully Implemented Into Practice

In China, "patent implantation" means "the patentee volunteers or licenses others to make, use, offer to sell, sell or import the patented product; or use the patented process; or use, offer to sell, sell or import the product directly obtained by the patented process; or assign the patent right to others for production or business purposes."[135] Thus, patent implementation is a broader concept than the patent industrialization, which can be measured by the industrialization rate. The implementation rate of utility model patents in China has shown an upward trend over the past six years, rising from 50.9 % in 2017 to 59.3 % in 2022, as illustrated in Figure 4 below.[136] These data demonstrate that over fifty percent of utility model patents were successfully implemented into practice during this period, indicating a significant contribution of these patents to technological advancements and innovation in China. The implementation rate of utility model patents signifies the percentage of utility model patents that were

---

135 State Intellectual Prop. Off., *The Role of Patents in Chinese Enterprises' Business Strategy*, WIPO (Dec. 2013) https://www.wipo.int/edocs/mdocs/mdocs/en/wipo_exp_ip_bei_14/wipo_exp_ip_bei_14_maohaoslides.pdf, [https://perma.cc/T4C3-5CMQ].

136 2021 China Patent Survey Report, *supra* note 130, at 33; 2022 China Patent Survey Report, *supra* note 130, at 49.

effectively put into practical use or commercialized.[137] The implementation rate serves as a measure of the real-world impact and commercial viability of utility model patents.

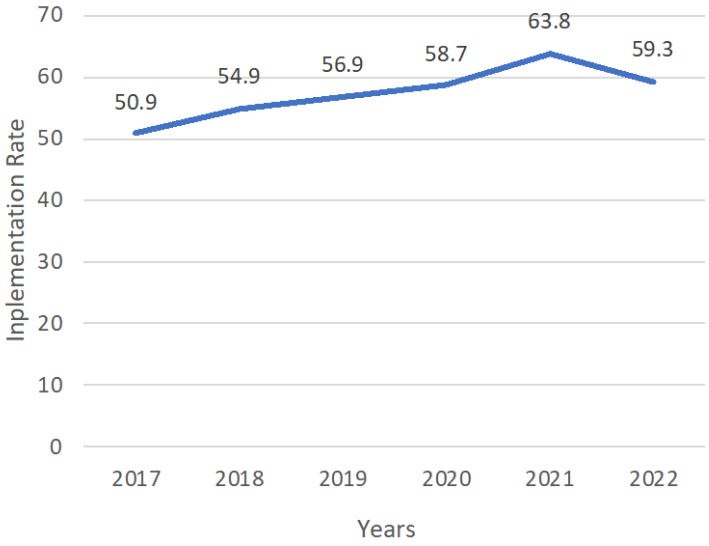


**Figure 4. 2017–2022 Utility Model Patents Implementation Rate**

### C. A Significant Portion of Utility Model Patents Were Licensed For Commercial Use

The licensing rate of utility model patents in China exhibited fluctuations from 2017 to 2022, as depicted in Figure 5 below.[138] Starting at 6.5 % in 2017, it steadily declined to its lowest point of 3.7 % in 2021. However, in 2022, there was a notable rebound, reaching its peak at 8.5 %. The licensing rate reflects the percentage of utility model patents that have been licensed to other entities or individuals for commercial use.[139] It indicates the willingness of patentees to grant licenses and the interest of third parties in utilizing the patented technology. The lowest licensing rate in 2021 may have been influenced by factors such as market conditions, COVID-19 pandemics, or specific challenges within industries. Notably, the World Health Organization (WHO) had declared COVID-19 a global

---

137 *See id.*

138 2021 China Patent Survey Report, *supra* note 130, at 28; 2022 China Patent Survey Report, *supra* note 130, at 44.

139 *See* 2022 China Patent Survey Report, *supra* note 130, at 44.

pandemic on March 11, 2020.[140] However, the rebound in 2022 indicates renewed interest and increased licensing activity.

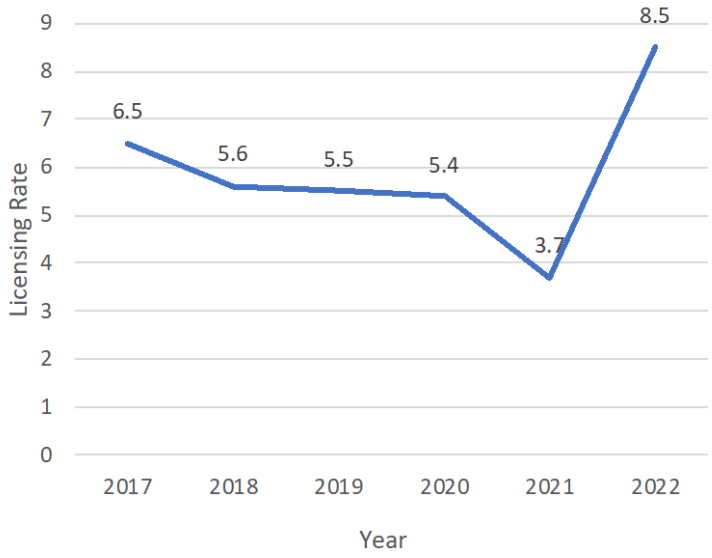


**Figure 5. 2017–2022 Utility Model Patents Licensing Rate**

### D. A Significant Portion of Utility Model Patents were Sold

The transfer rate of utility model patents in China experienced fluctuations from 2017 to 2022, ranging between 2.8 % and 5.2 %, as seen in Figure 6 below.[141] In 2022, the transfer rate was recorded at 3.7 %, indicating a decrease of 0.4 percentage points compared to 2021.[142] Patent transfer refers to the act of a patent holder transferring (selling) all of their acquired patent rights to another party. The relatively low transfer rates of utility model patents in China over this period suggest most patentees retain their utility model patents for their own use rather than transferring them. This data implies that patentees in China are less inclined to sell or transfer their utility model patents to other entities or individuals. There could be various reasons, such as utility model patents'

---

140 *Coronavirus Disease (COVID-19) Pandemic*, World Health Organization, https://www.who.int/europe/emergencies/situations/covid-19 [https://perma.cc/TV8J-DJE8].

141 *See* 2021 China Patent Survey Report, *supra* note 130, at 30; 2022 China Patent Survey Report, *supra* note 130, at 46.

142 *See* 2022 China Patent Survey Report, *supra* note 130, at 46.

perceived value and commercial potential, patentees' strategic considerations, or the nature of the innovations protected by utility model patents. It's important to note that while the transfer rates may be relatively low, this does not necessarily indicate that utility model patents are less valuable or significant. Patentees may choose to retain their utility model patents to develop and commercialize their own inventions or utilize them as a competitive advantage in their respective industries.

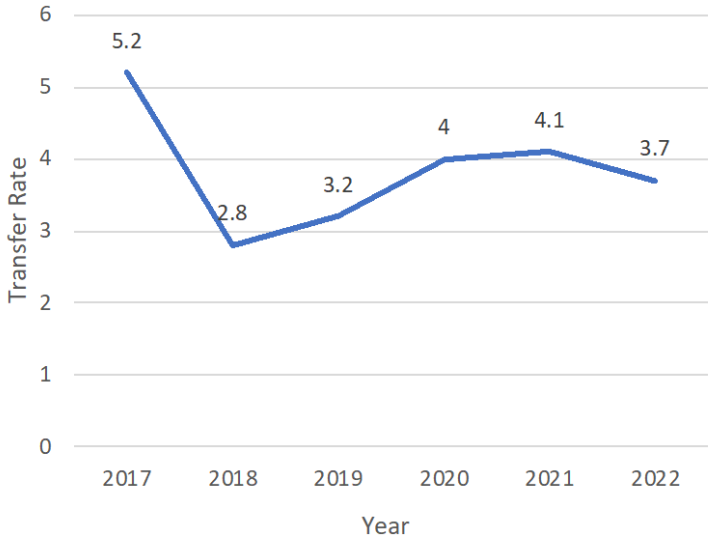


**Figure 6. 2017–2022 Utility Model Patents Transfer Rate**

### E. A Significant Proportion of Enterprise Patentees Perceive Utility Model Patents to Have a Positive Impact on Their Sales and Profits of Patented Products

According to the 2022 China Patent Survey Report ("Survey") conducted by the CNIPA for industrialized patents, it was found that a significant proportion of enterprise patentees perceive patents to have a positive impact on their sales and profits of patented products.[143] Specifically, 16.0 % of enterprise patentees reported a "very high" contribution from patents, while 49.8 % reported a "high" contribution.[144] Furthermore, 25.1 % of patentees believed that patents have an

[143] *See id.* at 115.

[144] *Id.*

"average" contribution to their sales or profits. The proportions of those who reported "low" and "very low" contributions were 2.5 % and 0.9 %, respectively.[145]

Based on the survey findings shown in Table 1, when it comes to utility model patents, 12.4 % of enterprise patentees reported a "very high" contribution from patents, while 49.1 % reported a "high" contribution.[146] Furthermore, 29.2 % believed that patents had an "average" contribution to their sales and profits.[147] The proportions of those reporting "low" and "very low" contributions were 2.7 % and 1.0 %, respectively.[148]

Table 1. Contribution of Different Enterprise Patents to Sales or Profit (%)[149]

| | **Invention Patent** | **Utility Model Patent** | **Design Patent** | **Total** |
|---|---|---|---|---|
| **Very High Contribution** | 17.9 | 12.4 | 12.8 | 16.0 |
| **Relatively High Contribution** | 52.3 | 49.1 | 39.9 | 49.8 |
| **Average Contribution** | 21.9 | 29.2 | 33.3 | 25.1 |
| **Relatively Low Contribution** | 2.0 | 2.7 | 4.7 | 2.5 |
| **Very Low Contribution** | 0.6 | 1.0 | 2.0 | 0.9 |
| **Uncertain** | 5.4 | 5.6 | 7.4 | 5.7 |
| **Total** | **100** | **100** | **100** | **100** |

[145] *Id.*

[146] *Id.* at 116.

[147] *Id*.

[148] 2022 CHINA PATENT SURVEY REPORT, *supra* note 130, at 116.

[149] *Id.*

According to the Survey, the percentage of patentees who reported experiencing patent infringement was 7.7 % in 2022 and 7.2 % in 2021.[150] When faced with infringement, patentees employed various measures to protect their rights. The most common actions taken included sending cease-and-desist letters through lawyers (33.5 %), initiating lawsuits (29.4 %), resolving disputes through negotiation (28.1 %), and utilizing arbitration or mediation (23.8 %).[151] Additional measures that patentees employed involved applying for pre-litigation orders (18.5 %) and seeking administrative treatment (13.1 %).[152] Interestingly, a notable proportion of patentees (27.2 %) chose not to take any measures.[153]

Reasons for not pursuing rights protection measures varied among enterprise patentees. The most prominent factors cited were the perceived lengthy protection process (66.9 %) and the perceived lack of satisfactory economic outcomes (46.7 %).[154] Other notable reasons included the enterprise's limitations in terms of professional expertise or funds to take action (38.4 %) and concerns about potential countermeasures from the infringer (26.1 %).[155] Additional reasons included the rapid technology iteration in the industry making the infringement less threatening to business operations (11.4 %), and the infringement occurring outside the sales market with minimal impact on business operations (3.2 %).[156]

### F. INFRINGEMENT COMPENSATION OF UTILITY MODEL PATENTS

The data presented in the Survey also sheds light on the compensation awarded in patent infringement cases and the utilization of utility model patents by companies. The Survey reveals that a notable proportion of enterprises, 33.7 %, received no compensation in patent infringement litigation cases.[157] This suggests a significant number of disputes where compensation was not agreed upon or awarded.

In terms of compensation amounts, the Survey shows that 21.8 % of enterprises receive compensation of fewer than 100,000 yuan, while a similar proportion, 21.8 %, receive compensation between 100,000 and 500,000 yuan

---

150 *Id.* at 160–61.

151 *Id.* at 164.

152 *Id*.

153 *Id.* at 163–64.

154 2022 CHINA PATENT SURVEY REPORT, *supra* note 130, at 168.

155 *Id*.

156 *Id.*

157 *Id.* at 172.

(excluding 500,000 yuan).[158] Furthermore, 8.6 % of enterprises receive compensation between 500,000 and one million yuan (excluding one million yuan), and 7.0 % receive compensation between one million and five million yuan (excluding five million yuan).[159] An additional 7.0 % of enterprises receive compensation exceeding five million yuan.[160] These findings highlight the varying degrees of compensation awarded in patent infringement cases and the financial implications for the parties involved. It may emphasize the need for effective mechanisms and processes to address compensation disputes and ensure fair outcomes.

### G. Multifaceted and Strategic Utilization of Utility Model Patents by Companies

The Survey also highlights companies' diverse applications of utility model patents.[161] It reveals that a significant proportion of companies, approximately 72.5 %, utilize utility model patents for production purposes to generate profits.[162] It also shows that a substantial portion of companies, 62.1 %, use utility model patents as a technology reserve, emphasizing their role in safeguarding future innovations and maintaining a competitive edge.[163]

Additionally, 39 percent of companies employ utility model patents for the qualification recognition of high-tech enterprises, technology-oriented small and medium-sized enterprises, 'specialized and new' enterprises, etc., typically to obtain tax benefits or reductions.[164] 28.7 % of companies utilize utility model patents to support future project applications, indicating their importance in securing funding or resources for new ventures.[165]

The Survey also indicates that 23.0 % of companies use utility model patents for reputation and propaganda, likely showcasing the role of patents in

158 *Id.*

159 *Id.*

160 2022 China Patent Survey Report, *supra* note 130, at 172.

161 *See id.* at 158.

162 *Id.*

163 *Id.*

164 *Id.* at 165.

165 2022 China Patent Survey Report, *supra* note 130, at 165.

enhancing brand image and market positioning.[166] Furthermore, 7.6 % of companies leverage utility model patents to obtain awards or support.[167]

Notably, 12.0 % of companies utilize utility model patents to generate licensing fees, demonstrating their potential as revenue-generating assets.[168] 14.2 % of companies employ utility model patents to protect their interests by lodging infringement complaints against competitors, while 18.1 % use them for suppressing or blocking competitors, highlighting their strategic significance in competitive landscapes.[169] These emphasize the importance of utility model patents in driving innovation and commercial success.[170]

Furthermore, 11.3 % of companies employ utility model patents for performance assessment, implying their role in evaluating research and development outcomes.[171]

The findings from the Survey showcase the multifaceted and strategic utilization of utility model patents by companies, underscoring their value in driving innovation, profitability, market positioning, and competitive advantage.

166 *Id.*

167 *Id.*

168 *Id.*

169 *Id.*

170 *Id.*

171 2022 CHINA PATENT SURVEY REPORT, *supra* note 130, at 165.

### H. CHINA'S INNOVATION LANDSCAPE AMIDST UNITED STATES-CHINA TRADE WAR: INSIGHTS FROM UTILITY MODEL TRENDS

The above data spanning from 2017 to 2022 also provides insights into China's innovation landscape amidst the backdrop of United States-China trade war.[172] President Trump's first tenure, beginning in 2017 and ending in 2021, marked a period of intensified trade and technology tensions between the United States and China.[173] The implementation and industrialization rates of utility model patents during this period displayed an upward trend. In contrast, the licensing and transfer rates exhibited fluctuations, potentially showing a slight decrease. While the trends in licensing and transfer rates might have been influenced by the COVID-19 pandemic (from late 2019 to May 2023), they could also signify a strategic move by industries to utilize their inventions for the purpose of strengthening their market positions within China. These fluctuations do not necessarily suggest a direct impact of United States-China trade war on China's innovation activities. Despite the trade war between the two countries, China's innovation activities seem to have remained robust during this period.

## VII. CONCLUSION

China's laws and procedures for utility model patents demonstrate an experimental approach to intellectual property protection that effectively addresses the country's specific economic and developmental contexts. The utility model system in China is strategically designed to align with the nation's economic development goals, taking into account the type of inventors and the technological landscape. This system serves as a catalyst for coordinated advancements in innovation and the economy. By adapting to the fast-paced nature of China's industrial landscape, the utility model system fosters technological advancements and significantly contributes to the country's overall economic growth. The utility model system in China has proven to be an effective tool in promoting innovation, particularly among Micro and Small Enterprises (MSEs) and individual inventors.

Nevertheless, ongoing efforts to prevent the abuse of this system and enhance the quality and integrity of utility model patents are crucial for

---

172 Andrew Mullen, *US-China Trade War Timeline: Key Dates and Events Since July 2018*, SOUTH CHINA MORNING POST (Aug. 29, 2021), https://www.scmp.com/economy/china-economy/article/3146489/us-china-trade-war-timeline-key-dates-and-events-july-2018 [https://perma.cc/84H8-S8P5].

173 *Id*.

maintaining a balanced and effective intellectual property framework in China. Continual improvements are necessary to ensure the system's reliability and fairness, fostering an environment that nurtures innovation and protects the rights of inventors.