China’s Utility Model Patent System: Innovation Driver or Deterrent

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CHINA’S UTILITY MODEL PATENT SYSTEM: INNOVATION DRIVER OR DETERRENT

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MESSAGE FROM STAFF EXECUTIVES

The U.S. Chamber of Commerce, the world’s largest business federation representing the interests of more than 3 million businesses, believes that there is no more important bilateral economic and commercial relationship in the world than that between the United States and China. Given the stakes for our two countries, we must ensure that our economic and commercial relationship fulfills its potential.

Our members’ exports to and investment in China have played a major role in China’s economic development. Moreover, our members represent a significant customer base for Chinese companies, including those in new and emerging industries. As principal advocates for open markets with China, the U.S. Chamber and our members are primary stakeholders in the success of the Chinese economy and its continuing integration into the global economy.

Today, China’s future hinges, in great part, on its efforts to rebalance its economy. These efforts include addressing the significant challenges that China has to confront in trying to move rapidly up the value chain toward a knowledge- and services-based economy to ensure success in a global economy.

To accomplish this historic transformation, the U.S. Chamber recognizes the Chinese government’s legitimate interest and responsibility to promote innovation capacity in China. We welcome China’s drive to further encourage investments in research and development (R&D) and other high-value economic activities, thereby enhancing global innovation capacity. China, in fact, has benefited greatly from R&D investments by foreign enterprises, and many U.S. Chamber members are investing in R&D in China. In today’s global economy, companies must adopt global “innovation networks” to succeed so that they can collaborate with customers, suppliers, competitors, universities, and government institutions around the world. Given the growing importance of China as an innovation hub, China’s role in global innovation networks and the policy and regulatory environment it is developing to promote innovation are of critical importance to many of our members.

As part of its effort to increase innovation, China has correctly recognized that it must nurture an environment that can help individuals and organizations create, acquire, protect, and enforce intellectual property (IP). In addition, the country has correctly prioritized strengthening its patent regime and patent enforcement to drive innovation. China’s National Patent Development Strategy (2011–2020) has set ambitious goals to increase patent filings to 2 million by 2015.
Consequently, patent filings are exploding in China today, but serious concerns are emerging about rapidly declining patent quality. There appears to be an overemphasis on quantitative patent targets in Chinese planning. And the focus on quantitative metrics has the potential to undermine key innovation policy objectives, give rise to patent trolls, and substantially increase unproductive litigation in the Chinese system—all to the detriment of China’s innovation potential.

It is in this spirit that the Chamber commissioned this assessment of patent quality trends in China, with a focus on China’s utility model patent (UMP) regime, by patent expert and long-time IP practitioner Thomas Moga. The aims of the study are to (1) examine the benefits and challenges of China’s UMP regime, (2) determine the UMP’s likely impact on the future of innovation in China, and (3) put forward constructive suggestions for improving China’s UMP regime based on a comparative analysis of experiences in other jurisdictions.

We hope that relevant IP authorities in China will find this report useful. The U.S. Chamber appreciates the many opportunities we have been provided to date to comment on the different iterations of China’s patent law and implementing regulations. China’s transparency in IP rulemaking has provided a critical avenue for sharing the U.S. experience on similar issues and has stimulated enhanced and constructive dialogue between the U.S. IP community and the Chinese government. On behalf of our members, the U.S. Chamber eagerly looks forward to future opportunities to exchange best practices with IP authorities in China on patent quality and other IP issues.

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This U.S. Chamber report fulfils an urgent need for more analysis of developments in Chinese patent law. China has made remarkable progress in developing its intellectual property (IP) laws, most notably the patent law. It has profited from experiences in other countries and has thoroughly studied the various systems around the globe. It has designed its own system, which during past years has taken a spin of its own. This emancipation from foreign law stems from the desire to deliver a set of laws tailored to the needs of the Chinese people. The approach chosen is very much a policy approach. Laws, administrative regulations, and court decisions alike are screened for policy coherence and are measured against policy benchmarks, such as the five-year plans issued by the Chinese government.

The rapid development of the Chinese economy and the Chinese legal environment has broad challenges of its own. The utility model system has quickly become one of the most used elements of patent law. As Thomas Moga’s report shows, many Chinese companies and applicants actually prefer the utility model over invention patents. Most Chinese experts would argue that the active use of the utility model is a positive development and exactly the reason for which the utility model system was adopted. The indigenous innovation approach mandates that a large number of patents be filed by Chinese companies. The rationale is that as Chinese companies become used to the system, they will learn step by step how to employ it and will start to innovate and defend their innovations. The utility model system seems ideal, as utility model patents are quickly granted and inexpensive.

In principle, one can agree with such an assessment. The picture changes slightly once the effects of the Chinese government’s industrial policies of recent years are taken into account. On the policy side, the dominant view is that China must enter a race for innovation. Benchmarks have been defined to show when an increase in innovative activity in each province and in China as a whole has taken place. This race to the top does not focus so much on quality or validity of rights but rather on achieving a predefined number of patent applications.

Policymakers seem to be aware that there may be collateral damage from the development of the patent system. This includes the deteriorating reputation of utility models, increased costs for businesses to determine freedom to operate, more legal conflicts, and more costs for patent offices and stakeholders to deal with waves of newly claimed rights. However, this patent system is seen as a necessity for the current stage of development in China, whose detrimental effects can be remedied later on. First reach the goal of a certain number of patents, and then worry about consequences.
Quantity without quality can create huge stress on a patent system and discredit the IP system. Already in China, the concept of so-called abuse of IP rights is being seriously debated. Many Chinese stakeholders suspect even normal enforcement to be a patent ambush and criticize “patent thickets” and low patent quality. From a regulatory perspective, the demand for benefits or protection of clearly invalid rights is seen simply as a contemporary reflection of the current development, which it is hoped will change over time. But once one looks for innovation, this hope seems short-sighted, and one may be quickly disappointed if the trend is allowed to continue unchecked.

Innovation requires significant risk taking and an environment that allows innovators to reap the rewards of their innovation. Risk taking can only be stimulated when litigation risks are predictable and the outcome is generally seen as acceptable. Rewards can only be reasonably expected when patents obtained are treated as valid and enforceable. To this end, the legal framework and patent system must provide a clear standard and an affordable, transparent, accessible, and balanced procedure for disputes.

Against this background, this report makes suggestions to further improve the utility model system in China. While policymakers and patent experts in China may feel that some of the suggestions are too far-reaching or are being introduced too early, it may still be worthwhile to look at the proposals with an open mind. Given that China always prepares its laws based on thorough study of existing systems, lessons can be learned from other jurisdictions about the substantive risks for the development of the Chinese patent system. Once a patent system has matured to a certain scale, it can become costly and difficult to change.

A strong and vibrant use of the utility model system exists in Germany: In 2011, about 15,000 utility model patents were filed in Germany, compared with roughly 60,000 invention patent applications. More than 3,000 (about 20%) of the utility model applications in Germany came from abroad, compared with less than 1% of foreign applications for utility models in China. At the end of 2011, about 96,000 utility models were in force in Germany. An estimated 10% of all patent litigation in Germany each year is related to utility models. In practice, the lack of examination is taken into account; only about 10% of applications for a preliminary injunction are granted in the case of utility models.

The main advantages of utility model patents (UMPs) in Germany are their ability to split off an application from other pending patent applications, their need to comply only with relative novelty requirements in order to be valid, and their six-month grace period of novelty for prior publications. In the past, the requirements in Germany for inventiveness of utility models were lower than for invention patents, but this has recently changed by the decision of the Federal Supreme Court BGH GRUR 2006, 842 - Demonstrationsschrank. The objective of making UMPs easily available for small and medium enterprises is already achieved by the lower requirements for novelty. The Federal Supreme Court explicitly stated that UMPs must increase the requirements for inventiveness in order to prevent the utility model from transitioning into a “fall back option for non-patentable subject matter.”
The quality of utility models under German law is further warranted by the possibility for everyone to apply for a Search Report for any registered utility model. In 2011, about 3,000 such applications (compared with 15,000 utility model applications) were made. It is interesting that only about 42% of the invalidation procedures initiated are decided by the board, whereas about 60% of the procedures end through an agreement between the parties, a waiver of right, or a withdrawal of the invalidation application.

The German evolution demonstrates that the increasing use of utility models may mandate more safeguards for sufficient quality of the right. There needs to be a strong and functioning system to weed out the clearly invalid rights and to prevent abuse of the system, especially where rights are easily made available.

Quality can be achieved through an affordable invalidation procedure and through tools to review granted utility models, such as Search Reports that are available even to those with a status of “interested party.” Abusive filing can be deterred by increased cost risks to avoid the losses of an invalidation procedure. In contrast, to ensure that inventive ideas obtain protection, the patent office should permit a broader scope of allowance for amendment of claims through guidance and assistance.

The unfortunate reputation of utility models of “easy to get in, hard to get out” is an invitation for free riders and actors. These actors do not truly support innovative efforts but only increase costs for taxpayers and the government. Doing away with misguided monetary benefits and granting higher damage awards for valid rights may prove more effective than focusing on the familiarization of the patent system for small businesses.

The author of this foreword hopes that this report will foster a lively discussion on how to prune and grow a healthy patent tree in China. Innovative efforts may have to be undertaken to achieve this objective.

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(The views herein are those of the author and are not attributable to any client, institution, or government.)
Imagine, for a moment, a large transitional market economy where the state enacts plans to mandate how real property should be developed and used. A wide range of government agencies are involved in implementing this plan, and their officials are rewarded for satisfying planning targets. The national and local governments promulgate various laws and rules regarding real property, insisting that every county make more effective use of its property and preparing rewards for office buildings and residences built, as well as ports, parks, schools, and other facilities completed. Localities are proud to publish annual reports detailing how much vacant property has been put to use, how much space has been occupied, how many buildings have been constructed, the average class size per student, and other statistics. Huge amounts of construction ensue.

One can easily imagine that in this society, real estate development would be based on a highly bureaucratized approach: The state develops quantitative goals, such as numbers or types of buildings completed in a given year. Quantity is, of necessity, the key factor, because it is exceedingly difficult to measure the value of properties, particularly over a vast landmass or in a complex economy. Over time, as property plans develop, the density of property utilization increases without consideration of the need for open space or quality of construction. Toward the end of each planning year, local governments and officials rush to complete projects to demonstrate their fulfillment of national goals. Economic efforts are increasingly redirected from other productive efforts to real estate—even among companies that do not have significant reasons to undertake real estate development—in order to show that they, too, are part of the “plan.”

In this economy, market-based laws may easily take a backseat to the primacy of the state. For example, property may be expropriated with relative ease for state use or to achieve state standards. Complex rules regarding the use of property in contravention of state standards may evolve. As state mandates become increasingly important, property owners, real estate developers, and other commercial actors are driven to determine what their roles will be in the state real property plan, rather than consider more efficient market-driven projects. Even private property legal concepts, such as “fee simple absolute” or trespass, take on a different meaning when property is owned, controlled, or planned by the state. In such a system, the legal system eventually becomes more concerned about disruption of its real property plans, about maintaining the “market order” for real estate development that it has labored to create, than about the inherent value of the property it is developing.

This seemingly far-fetched hypothetical example may suggest an inappropriate comparison with China’s intellectual property (IP) regime for utility model patents (UMPs) as described...
by Thomas Moga. The differences may appear too obvious: Real property is, after all, different from intellectual property in many respects. We all need to use or acquire real property for our residences or office space. IP is not something each person must have, although we may all benefit from it. Real property is a physical thing, and various forms of ownership or use involve actual occupancy of the property. The patent system, in particular, is not physical, and infringement can be difficult to prove. Moreover, it is based on a right granted to exclude others for a limited time in exchange for a disclosure of that invention to the public. The state is therefore more intimately involved in creating IP and in creating a balance between the creation of the right and the public interests in using the right. Furthermore, IP creation can be an indicator of a state’s technological progress in ways that real property is not, and thus it has a different set of benchmarks.

Nonetheless, between the lines of Moga’s brief work, one can discern that intellectual property is also burdened to a degree by its real property “cousin” in China. Indeed, the counterfactual question of whether real property is treated less favorably than intellectual property provides some important reasons for intellectual property rights’ (IPR) favored status in Chinese law, including that IP is undeniably a private property right owned by individuals and enterprises; the Agreement on Trade Related Aspects of Intellectual Property Rights, which China has agreed to implement, commits China to protect IPR as a private right. By contrast, all real property in China is owned by the state pursuant to China’s constitution, and China is under no absolute multilateral treaty obligation to treat real property rights otherwise. Finally, as many scholars have noted, IP was intended to help stimulate the creative inclinations of China’s intelligentsia after the end of the Cultural Revolution precisely by granting them a property right. There was no similar initiative for real property rights. China’s recent legislative history also shows the importance of IP-China’s real property law (2007) postdates by more than a decade China’s patent law (1983).

As Moga points out, the idea of using UMPs to incentivize creation by a broader spectrum of China’s creative class was not a bad one in 1983, when such incentives for China’s intellectual classes were of key concern. However, by 2012, it appears to have outgrown its original motivations. What has changed in the patent system is the incorporation of patents into China’s planning mechanisms and its bureaucratization with subsidies, incentives, quotas, and awards for patenting, with few disincentives to low-quality patents, particularly for unexamined UMPs.

Today, the “patent thicket” that Moga describes challenges serious innovators in China, who must review thousands of examples unexamined prior art to see if they have the freedom to operate. This “patent thicket” has its analogue in real property in China, too, where property that an individual may wish to maintain or develop gets surrounded by state construction, becoming so-called nail houses. Then the original owner may be deprived of access to the full value of the original premises because of state construction and intervention.
Thomas Moga and Thomas Pattloch have offered many useful suggestions on how the utility model system might be reformed to become once again an engine for encouraging innovation by Chinese companies. All three of us share a concern that the current UMP system in China presents a potentially significant threat to U.S. and foreign companies seeking to innovate. The original motive of UMPs and the intellectual property system in China was to stimulate innovation by intellectuals in the aftermath of the devastation brought by the Cultural Revolution. As China has developed meteorically with its opening up, the country’s innovative ecosystem is no longer a concern only to its leadership. It is important to companies throughout the world that rely on the Chinese market or wish to partner with China’s abundant scientific and technical resources. It is my personal belief that in its current form the disadvantages of the UMP system outweigh their usefulness, but that an appropriate UMP system could continue to serve the needs of China’s smaller innovators.

I hope that China chooses a path to encourage innovation with the least social cost possible, where the IP system retains its essential characteristics of securing the fruits of discoveries to its market-driven inventors. And I believe that Moga has made a valuable contribution to that discussion.

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(The views herein are those of the author and are not attributable to any client, institution, or government.)
EXECUTIVE SUMMARY

This report reviews utility model patent (UMP) practices and procedures in China. It considers the advantages and disadvantages of obtaining utility model patents, their enforcement, how the system is being correctly used by some and wrongfully used by others, and changes to the system that the Chinese government should consider adopting for the benefit of both domestic and foreign users. It is hoped that the comments and suggestions contained in this report will be received in the spirit in which they were intended and will foster a constructive dialogue based on mutual respect and common purpose.

When the utility model patent was made part of China’s patent law, it was intended to encourage inventors, particularly individuals and small companies not familiar with protecting their inventions, to obtain an inexpensive and abbreviated form of patent protection. A quarter of a century later, the original purpose is all but forgotten. For many, both inside and outside of China, 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. Instead of simply encouraging inventors, the less costly patent prosecution process is yielding utility model patents that are inexpensive, unexamined, rapidly granted, and difficult to invalidate when necessary, resulting in patent weapons that are disruptive to normal business growth. It would appear that explosive growth in utility model patents is being misconstrued by officials as an indication of innovation progress as they establish quotas and subsidies to encourage more utility model patents. Additionally, and clearly not a desired outcome of the policy underlying the establishment of utility model patents, it appears to be a potent weapon of choice by non-practicing enterprises, the NPEs, known in many circles as patent trolls.

It is impossible today for the Chinese government to keep up with the abuses of the system by utility model patent holders without making one or more significant and timely course corrections. Potential changes suggested by this comparative study include the following:

- Requiring the applicant to sign an oath or declaration attesting to the genuineness of the invention.
- Having the UMP application undergo substantive examination.
- Changing the use of the current Evaluation Report.
- Requiring the submission of an International Searching Authority (ISA) Search Report.
- Allowing third parties to comment.
- Increasing the statutory thresholds for infringement.
• Increasing the ceiling on damages.
• Establishing a separate opposition proceeding for utility model patents.
• Eliminating or restricting subsidization of utility model patents.
• Providing more robust compensation for abusive assertion of invalid rights.

The utility model patent system in China is both a strength and a weakness. There is no single feature of the utility model patent in China that makes it “weak.” Rather, it is a number of characteristics, including, for example, the shortcomings inherent in the enforcement system and the fact that more than 35% of all patent applications in China are for utility model patents, resulting in a system in which unexamined utility model patents have the same scope, presumption of validity, and enforcement or threat value as substantively examined patents. This is not what the drafters of China’s Patent Law intended, and it certainly is not the approach taken by other countries with similar patent laws that have safeguards to protect against many of the problems created by China’s utility model patent system.

It would benefit both Chinese and foreign right holders if the original intent of the Chinese utility model patent providing individuals and small companies with an inexpensive and effective form of patent protection were again made central to the practice and spirit of the law. It is generally agreed, based on the perspective of industry and Chinese officials, that the meteoric rise in filings of utility model patent applications poses a risk to innovation in China. The response needs to be undertaken carefully and fully and must go beyond a response for “political” reasons, such as rejecting more cases or directing companies to file more applications for invention patents to offset the number of utility model patent application filings. The matter should be treated by the government of China with the highest degree of urgency.
THE ABCS OF UTILITY MODEL PATENTS (UMPs)

HISTORY OF THE UMP IN CHINA

When China's first Patent Law went into effect in 1985, it made available the utility model patent (UMP) as one of three forms of patent protection, the others being the invention patent and the design patent. The adoption of the utility model patent was well intentioned and has provided benefits to Chinese society. The UMP was intended to be an inexpensive and fast route for sole inventors and startup companies to obtain some form of patent protection for less technically advanced inventions without breaking the bank and without tying up a lot of time in prosecution. Back then, the Chinese utility model patent arguably helped small, poorly capitalized businesses get off the ground.

To accomplish this, the UMP has several features distinguishing it from the invention patent. First, it was designed to apply to a narrower field of less technically advanced inventions. Second, it has a lower standard for patentability. Finally, the absence of substantive examination is a key feature of the UMP that was adopted to reduce cost and complexity. As a result, it should be clear that UMPs could be granted that would never survive substantive examination.

That was then, before the information highway and the high speed universal exchange of information. Something that began as a political decision to allow sole inventors and startup companies to easily obtain patents at low cost has morphed into something that was unintended by those who drafted the patent laws and supported the utility model patent and its uses in China. What the system has become is something that could hardly have been imagined when the law was first drafted in the late 1970s.

The Chinese government, especially the State Intellectual Property Office (SIPO), is aware of the improper and abusive uses of utility model patents but regards these as unintended consequences that are justified by the benefits derived from UMPs in their current form. However, the unintended negative consequences of utility model patent practice will only be magnified over time as UMP applications continue to increase exponentially, and litigation and aggressive use of utility model patents of questionable value also grow, changes we are witnessing today.

THE BASICS OF FILING

Unlike some countries that have utility model systems alongside the invention patent system, the Patent Law of China is a unified law that defines protection for the invention patent, the utility model patent, and the design patent. Each of these patents is an “invention-creation” under the law (Patent Law, Article 2), which means “inventions, utility models, and designs.” Rule 2 of the Implementing Regulations of the Patent Law provides additional clarity by defining
an “invention” as “any new technical solution relating to a product, a process or improvement thereof,” thus covering products and processes. In contrast, a “utility model” is defined as “any new technical solution relating to the shape, the structure, or their combination, or a product, which is fit for practical use,” covering structures and shapes of mechanical structures.

However, experience has shown that the types of inventions covered by the utility model patent in China are sometimes broader than permitted by the law. Utility model patents in China have been granted for a broad variety of inventions that are not “structures and shapes,” such as pharmaceutical compositions, electrical circuits, and software.4

To be patentable as a utility model, an invention “must possess novelty, inventiveness and practical applicability.” (Patent Law, Article 22) According to the Patent Law, “novelty” means that the utility model “does not form part of the prior art.” This form of “novelty” is “absolute” and is a relatively low standard. (For example, if it was not previously known to make a chartreuse pencil, then the invention claiming a chartreuse pencil would be novel.) This is the same standard as applied to invention patents. (Article 22)

Inventiveness as applied to the utility model means that the invention has “substantive features and represents progress.” (Article 22) This standard of inventiveness differs from that of an invention patent, which requires that the invention has “prominent substantive features and represents notable progress.”

The applicant for a utility model patent initiates the application process by submitting, by way of a patent agent or attorney, the requisite formal papers (an application cover sheet identifying the inventors and their citizenship and the assignment document if applicable), the application translated into Chinese, and the requisite official fee (RMB 500 or about US$78). Ten claims are permitted for the standard filing fee, although more claims may be included by paying an additional charge.

Once filed, the application is subject only to preliminary examination. This examination includes a review as to formalities only, including a cursory review of the claims to verify appropriate subject matter for a UMP. As such, there is no searching or comparison of claims to the prior art, as would be the case during substantive examination.

The utility model patent is issued thereafter according to Article 40 of the Patent Law:

Where it is found after preliminary examination that there is no cause for rejection of the application for a patent for utility model, the State Intellectual Property Office shall make a decision to grant the patent right for utility model.

Thus, the law is biased toward grant of the utility model patent as no search is required and no comparison with the prior art is made.
This contrasts sharply with procedures involved in the prosecution and grant of an invention patent, which includes searching and an exchange of office actions and responses between the examiner and the applicant:

Where it is found after examination as to substance that there is no cause for rejection of the application for a patent for invention, the State Intellectual Property Office shall make a decision to grant the patent right for invention. (Patent Law, Article 39)

Once registered, the utility model patent is presumed valid, although the validity of the patent may be challenged by proceedings before the Patent Reexamination Board. (Patent Law, Article 45) For the past 10 years, more than twice as many invalidity requests filed with SIPO’s Patent Reexamination Board are for utility model patents compared with invention patents.

Maintenance fees must be paid annually to maintain the registered utility model patent. (Implementing Regulations, Rule 93)

A BUSINESS PERSPECTIVE

How Business Can Benefit From UMPs

There is no doubt that the utility model patent in China can be an effective and valuable part of a company’s patent portfolio. It is suitable for a low-level, simple invention for which short-term protection is adequate. Because of its quick file-to-grant cycle, the utility model patent is attractive for those that need protection quickly and at a low cost. The lower threshold for the inventive step is particularly suited for a company that has an invention representing an incremental improvement.

There are a number of business reasons behind obtaining a Chinese utility model patent beyond its use in actions against infringers. Chinese utility model patents also have value in cross-licensing and can be attractive to other utility model patent holders as barter. One chief patent counsel offered a more cynical reason for obtaining utility model patents in China: “Some Chinese businesses see their utility model patent portfolio as potentially very strong when combined with other utility model patents. Simply put, ‘We may have a lot of junk patents but if we merge them with your junk patents we will have strength in numbers.”

In general, applicants seek utility model patent protection in China as a relatively easy way to obtain patent coverage. An application tends to be low cost (RMB 3600 or about US$565 attorney fee [a standard fee established by the All China Patent Agent Association], RMB 500 or about US$78 filing fee, plus translation), with a grant occurring typically between 7 and 10 months after filing. Like an invention patent, the scope of protection is defined by the claims.

The relatively low cost and quick grant (due to a lack of substantive examination) make the utility model patent easy to obtain in China. Some applicants, therefore, obtain utility
model patents because they are easy to get, allowing the individuals or companies to build a portfolio representing their inventions quickly and inexpensively. These individuals or companies (typically small and medium-size companies dealing with mechanical technologies) are not bothered by the relatively short life of the utility model patent, believing it to be a fair trade-off to save money and time. The utility model patent in China can be a tool that is particularly useful to help fledgling companies get off the ground.

Many companies, typically sophisticated companies that are better capitalized than fledgling ones building an inexpensive portfolio, often file utility model patent applications together with invention patent applications as part of China’s dual filing arrangement. While two patents cannot exist in China claiming the same invention, it is possible to file applications on both. During substantive examination of the invention patent, the examiner will ordinarily identify the previously issued utility model patent and require the applicant to choose between the two. This is codified in Article 9 of the amended Patent Law.

The dual-filing scheme can lead to abuses of the system. In the case of the utility model patent, the claims are issued as filed as they do not undergo substantive examination, and consequently, there is no reason to amend the claims. In contrast, it is the typical strategy of patent counsel to seek as broad protection as the known prior art will permit and here, naturally, it is important to “push the envelope.” Thus, examined claims are usually amended, typically by narrowing, during the course of prosecution. Assuming that the claims of the utility model patent application and the invention patent application are the same when filed, the invention patent claims, as issued, will therefore be narrower than the claims of the nonamended utility model patent. In at least one instance, a defendant, found liable for infringement of a utility model, sought redress when it was discovered that the simultaneously filed invention patent had narrower claims than the utility model patent-in-suit. In that instance, the plaintiff abandoned the utility model patent in favor of the invention patent, complete with its narrower claims that the adjudged guilty infringer would not have infringed. This matter is still being resolved, but it clearly demonstrates a potential problem not to be ignored in the dual-filing scheme.

Why is it, then, that foreign applicants do not file more UMPs? Most patent lawyers or agents trained for practice in the United States do not have experience with, and therefore have no comfort level for, the utility model as a form of patent protection. Thus, as this form of protection is generally foreign to them, it is avoided both because of lack of familiarity and because of suspicions as to the real value of the utility model in other jurisdictions. The data show that this is not simply an American attitude, but it is more universal. In countries where a second tier of patent is available, the majority of applicants are domestic. Foreign applicants, even from countries with a second tier of patent protection, are in the minority.

This is the situation in China. According to SIPO statistics, a total of 1,633,347 patent applications were received by the office in 2011, representing a 33.6% increase over 2010. Of the total number, 526,412 (32.2%) were applications for invention, 585,467 (35.8%)
were for utility model, and 521,468 (31.9%) were for design.\textsuperscript{7} Foreign applicants filed only 4,164, or 0.71%, of the utility model patent applications filed that year.\textsuperscript{8} The year 2011 was not an aberration but is generally consistent with percentages of filings from previous years, although the numbers of all patent filings in China have gone up dramatically over time.\textsuperscript{9}

Where the typical American approach to a patent portfolio in China is to file for an invention patent first, followed by design patents and utility model patents, the typical Chinese approach is to seek utility model and design patent protection first, followed after a time by invention patents.

\textbf{When UMPs Don’t Fit}

In addition to the lack of familiarity with UMPs by foreign applicants, in some cases the utility model patent simply does not fit a company’s products or business model. While some non-Chinese pharmaceutical companies focus on chemical patent protection in China, at least one U.S.-based pharmaceutical company avoids utility model patents in that country because much of its inventing is directed toward methods of producing pharmaceutical drugs. The prohibition against the protection of methods by way of utility model patents is a natural barrier to the use of such patents.

A medical equipment maker, also based in the United States, says that the company’s equipment is too sophisticated and too complex for even the well-capitalized counterfeiter. He concludes that utility model patents in China, assumed to be directed to low-level technologies, are not adequate to protect the sort of high-level technology developed by his company.

Other products, such as pharmaceutical products and medical equipment, need a long protected patent life, and the utility model patent with its maximum life of 10 years is simply unsuited for this type of protection. For example, a Fortune 100 company that develops and commercializes its product in China decided against obtaining utility model patents in that country on the grounds that a term of 10 years is inadequate to protect its product, which has a commercial life longer than the term of the utility model patent. It was decided that the speed and low cost of obtaining such patents does not offset the short term life. The company has this same policy in other countries where second tier patent protection is available.

Other companies do not particularly need to acquire protection quickly since “productizing” their inventions does not happen quickly, and they have time to wait for an invention patent to issue.

One reason for not filing more utility model patent applications in China is purely financial, with the applicant company having to choose between the more expensive but arguably stronger invention patent and the less expensive but weaker utility model patent. Another cost-related reason held by a U.S.-based company is that utility model patents do not provide enough savings to justify their filing compared with the costs associated with the filing and prosecution of an invention patent.
But another company in the same group long ago decided against obtaining utility model patents in China and studiously avoids including utility model patents in its portfolio. The reason: The chief patent counsel of the company would not want a portfolio full of patents the value of which is unknown. “How would we know what we have and what it is worth?” is the fundamental question that forced the decision not to pursue utility model patents in China. Another chief patent counsel said, “We don’t file for utility model patents in China since we need to obtain something that has some semblance of enforceability and validity.”

**THE CHANGING UMP LANDSCAPE IN CHINA: THE DRIVERS OF UMP FILINGS**

**INDIGENOUS INNOVATION: THE PRESSURE TO INNOVATE**

Government officials in China from the highest levels argue that a move must be made from “made in China” to “innovate in China,” one of the most critical drivers of China’s current push toward so-called indigenous innovation. Many of these same officials regard patents as the bellwether of innovation, and in many ways this may be true where the patents reflect real inventions. China’s stated goal is to have Chinese entities file 2 million patent applications per year by 2015. Some of these same officials carry this argument to its “logical” conclusion—if a few patents represent some Chinese innovation, then many, many patents must, by the simplest form of math, represent a great deal of Chinese innovation. So leaders in Chinese provinces compete with one another in filings to achieve nothing more than high numbers. Some universities are driven to do the same.

If the desired goal of the Chinese government is to have 2 million patents filed per year (compared with, for example, the United States that had 503,582 utility [invention] patent applications filed in 2011), then indeed the game is on. The pressure on Chinese entities to file patent applications is enormous, perhaps sometimes overwhelming, and really can be beyond the full comprehension of outsiders. In at least one province, businesses that do not file patent applications may face closure of their operations. This mandate to file is directed not just at state-owned enterprises but to private entities as well.

By giving the appearance of inventing, community and business leaders are thought to be responsive to the great internal pressure created by the indigenous innovation drive. This push, based largely on the belief that China relies too heavily on foreign innovation and not enough on its own creativity, appears at all levels, both horizontal, that is, across the country from east to west and north to south, and vertical, that is, at all levels of government, from local government structures to the central government. Because of this national push, there is enormous pressure placed on universities and companies to create, innovate, or at least give the appearance that creation and innovation are going on. At the university level, and to some extent at the corporate level, academic papers are published on questionable research and often based on ideas and concepts copied from others, sometimes verbatim. But the progress in “inventing” can perhaps
most easily be measured by counting patent filings. Knowing this, applicants seeking to increase their utility model patents file just about anything, from old technology to unpatentable technology to, in some instances, photocopies of previously issued patents.

Consider the experience of one chief patent counsel: His published patents have been searched by his Chinese competitors, with the relevant ones being “changed slightly” and re-filed using the same drawings as the published patent, typically an invention patent. Absent substantive examination, there is no way for the State Intellectual Property Office (SIPO) to monitor or to correct this situation.

Applicants that file for the sake of inflating their portfolios through multiple utility model patent filings may not appear to create lasting harm to the extent that they do not assert these patents against others and abandon them once granted. (An annuity fee must be paid to maintain a utility model patent in China. This requirement endures for the entire life of the patent. Failure to pay the annuity results in abandonment of the patent. [Patent Law, Article 43]) However, being mere collectors of poor-quality utility model patents undermines the very purpose of the innovation drive—to inspire real innovation and creation. While clearly not all issued Chinese utility model patents are substandard, both Chinese and foreign entities are aware of the fact that many of the utility model patents are of poor quality and are thus not impressed by the numbers of reported utility model patents. But for those unaware, the number of utility models being filed in China is a misleading indicator of the progress in real innovation going on inside that country.

Unfortunately, these patents are increasingly creating problems for both domestic and foreign businesses and in the process are harming the reputation of China’s patent system. While many utility model patents in China are of low quality, some have no quality. Chinese officials publicly refer to utility model patents having no quality as “junk” or “fake”:

As far as design patents and utility model patents which do not undergo substantive examination … there has been a misguided effort … these patents that have been in formal compliance but are substantively invalid under the patent law. This is the phenomenon of law suits involving “fake patents.” The actors use “legal” methods to obtain a patent and use this patent to disturb the order of the market, and cause a certain harm, even where the actor fully knows that the technology that the actor has applied for has been publicly available for some time, to the point of the patent even being in the public domain, and that the patent does not comply with the standards for patentability of the patent law. …

Little wonder then that the National Development and Reform Commission referred to the growing number of junk utility model patents as being like weeds that surround and kill the growing tree.
The problem of poor quality patents actually looks worse in the future. According to a report recently issued by the European Chamber, … there might be over 2.6 million less-than-highest-quality patents (utility models and design patents) filed in China in 2015 alone, which would be substantially more than the estimated filings of highest-quality patents in that year. 18

In addition, “… it is projected that there might be 39% more (over 430,000) total utility model applications than total invention patent applications filed in China in 2015, which is 28 percentage points more than the comparison rate between the two in 2011.19 The year 2015 is also the year in which China is targeting having 2 million domestic patent applications filed.20

THE ALLURE OF THE UMP TO SMALL AND MEDIUM ENTERPRISES

A significant majority of small and medium enterprises (SMEs) in China, perhaps as high as 80%, believe that a patent is necessary to operate in a certain industry.21

This seemingly innocent error is not without harm. Since the mistaken companies see the patent as key to working in a given commercial arena, they are driven to seek patents on inventions that are either of questionable technical quality or are not original to the applicant.22 Indeed, the mistaken applicant usually gravitates toward filing for a patent that is inexpensive and easy to obtain just to produce something. That type of patent is typically the utility model patent, and the result is that the number of utility model patents is artificially expanded.

SUBSIDIES AND OTHER INCENTIVES

In 2008, the Chinese government enacted provisions that reward “high and new technology” businesses in China with tax breaks.23 If an applicant company can demonstrate that it has core technology of a sufficient technological level, then it may enjoy a reduced corporate income tax rate of 15% and, in addition, may be eligible to receive a value-added tax deduction. 24

Local and provincial governments also subsidize sole inventors and companies for filing patent applications. While the system of subsidies in China must be made much more transparent, it is known that the level of the subsidy and the type of technology awarded a subsidy vary.25
Subsidies by City or Province

<table>
<thead>
<tr>
<th>City or Province</th>
<th>Amount of Patent Subsidy</th>
</tr>
</thead>
</table>
| **Beijing**      | RMB 500 for large entities  
RMB 150 for small entities and individuals |
| **Shanghai**     | Actual amount of government filing fees and associated fees |
| **Jiangsu**      | Half of government fees |
| **Fujian**       | Actual amount of filing fees  
(after the grant of the patent right) |
| **Hunan**        | RMB 300 for attorney fees and more than 50% of the actual amount  
of government application and filing fees (only for utility model patent applications provide a “great contribution”) |
| **Sichuan**      | RMB 100 for service invention-creation  
RMB 50 for nonservice invention-creation |
| **Chongqing**    | RMB 230 |
| **Guangxi**      | RMB 500 for attorney fees (but only where the attorney practices in Guangxi) |
| **Shanxi**       | Less than RMB 500 for government filing fees  
Less than RMB 1,500 for attorney fees |
| **Gansu**        | Less than RMB 500 |

But it is not only cash incentives\(^{26}\) that drive up the number of patent filings. University professors stand an increased chance of earning tenure by filing more patent applications, and “[w]orkers and students who file patents are more likely to earn a hukou (residence permit) to live in a desirable city.”\(^{27}\)

Today’s patent filing subsidies “not only waste resources, but otherwise [do] not necessarily most effectively support the building of highest-quality patents and related innovation.”\(^{28}\) According to a study on patent quality prepared by former SIPO Commissioner Dr. Gao Lulin and others, this deficiency is manifested in repeated patent applications, splitting inventions into smaller inventions just to boost the number of applications, filings for products that are already published or disclosed for a significant amount of time and are not patentable, filing an application to get an application number but not paying fees, and so on.\(^{29}\)

The push to file, whether driven by subsidies or by other incentives, defines a strategy that is “filled with metrics, right down to the goals for patents owned per million people. It speaks of an innovation-by-the-numbers mentality, much like a student who equates knowledge with scores on standardized tests.”\(^{30}\)
FILED AND GRANTED BUT NOT MAINTAINED

Both tax incentives and various subsidies drive applicants to apply for—but not necessarily maintain—the utility model patent, further driving up the number of junk utility model patents. In fact, the percentage of maintained utility model patents is the lowest of all three patents issued in China.

<table>
<thead>
<tr>
<th>Type of Patent</th>
<th>Granted April 1985 to December 2010</th>
<th>Still in Force as of December 2010</th>
<th>Percentage (%) Still in Force as of December 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invention</td>
<td>336,134</td>
<td>257,893</td>
<td>76.7</td>
</tr>
<tr>
<td>Design</td>
<td>1,348,873</td>
<td>718,056</td>
<td>53.2</td>
</tr>
<tr>
<td>Utility Model</td>
<td>1,699,465</td>
<td>849,454</td>
<td>49.9</td>
</tr>
</tbody>
</table>

10-Year UMP Maintenance-Domestic Versus Foreign

While the exact reasons that patents become invalid in China are not known, Chinese sources confirm that more than 90% of the invalid patents are not in force because of failure to pay the maintenance fee.
THE UNEXAMINED UMP: A THREAT TO CHINESE INNOVATION AND BEYOND

EASY TO GET, TOUGH TO INVALIDATE

In spite of the fact that UMPs are not examined and, as such, are relatively easy to obtain, they have proven to be difficult to invalidate in practice. This is contrary to the opinions of some practitioners who believe that these junk patents can be readily invalidated. Articles 45 through 47 of the Patent Law provide measures for the invalidation of issued patents through proceedings before the Patent Reexamination Board (PRB). The party seeking invalidation of the utility model patent is limited to citing a maximum of two references per claim.31 This means that where differences exist between the prior art and the claimed invention, no matter how obvious or incremental, it can be nearly impossible to find that silver bullet. As a result of setting invention criteria for the utility model patents so low, one cannot argue that the patent claims are nothing more than an obvious variation of the known prior art. Enormous time and resources can be expended to find references necessary to invalidate each claim of the utility model patent.

Between 2000 and 2008, the PRB resolved 7,534 requests for invalidation of utility model patents. The results show that only about 4% more patents were held valid than were held invalid. But the most telling part of these statistics is how these data compare with the percentages related to the invalidation rate for invention patents for this same period. The overall allowance rate of invention patent applications in China is about 60%, with most of the rejected applications being rejected for failing to meet the higher inventiveness standard as required in the Patent Law. (Article 22)

One would expect that the utility model patent, having undergone no substantive examination, would show a much higher rate of invalidity. But the rate is comparable, and it should not be. Looked at another way, at a minimum, and just like invention patent applications, 40% of utility model applications should be expected to fail during examination and another 25% during invalidation proceedings. However, given no substantive examination, the number that should fail during invalidation should reflect a combination of these, a combined number much higher than 40%.

Results of 7,534 Resolved Requests for Invalidation by the PRB 2000–2008

<table>
<thead>
<tr>
<th>Type of Patent</th>
<th>Validity Upheld (%)</th>
<th>Partially Invalidated (%)</th>
<th>Wholly Invalidated (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invention</td>
<td>29.72</td>
<td>16.47</td>
<td>25.39</td>
</tr>
<tr>
<td>Utility Model</td>
<td>31.82</td>
<td>11.53</td>
<td>33.26</td>
</tr>
</tbody>
</table>
The unavoidable conclusion is that utility model patents are too difficult to invalidate. Invalidation proceedings can easily cost the party seeking the invalidation of the patent upward of $30,000 and may take one or two years. Often, the result is only partially satisfactory wherein the claims of the utility model are narrowed such that they may or may not continue to read on the accused device, but the patent itself is not invalidated. And like any proceeding before an administrative body, the outcome is not within the control of the parties and is thus not predictable. Today, when a party prepares a validity opinion for a Chinese utility model patent, it must include the cost and consider the likelihood of success of invalidating the patent, adding a substantial burden.

Knowing this, accused infringers often find it easier and more financially practical to settle UMP infringement cases, often for an amount small enough to make the transaction more attractive than possible litigation. Some Chinese courts have encouraged settlement based on the cost of litigation weighed against the cost of an invalidation proceeding. Another factor to consider is the fact that reversal rates in China are very low, further impacting the overall risk. Smaller Chinese companies and individuals, however, suffer the most from the cost of settlement. In the end, the resources are diverted away from real innovation.

**THE RAPID RISE OF THE PATENT TROLL IN CHINA**

Known almost worldwide is the “non-practicing entity” (NPE), a patent owner that does not produce anything and does not commercialize anything but, instead, uses a patent offensively to extract money through forced licensing or litigation. This type of patent holder is also disparagingly known as a “patent troll.” By some measure it is estimated that “over 50% of patents in China are filed for the sole purpose of being used for relitigation and/or to first initiate litigation.”

There is nothing new about the existence and work of the patent troll, and he certainly is not unique to China. His leech-like conduct in the United States has been well documented and has been the subject of many articles and discussions. In China, the trolls are increasing in number, and their behavior, either as individuals or as locally based patent “companies,” wears on both Chinese and foreign businesses. The NPEs in China typically acquire patents from individuals, small companies, and universities. In 2010, a significant number of UMP applications in China were made by non-service owners—at a rate of more than twice the number submitted by invention patent applicants.

<table>
<thead>
<tr>
<th>Invention</th>
<th>%</th>
<th>UMP</th>
<th>%</th>
<th>Design</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>391,177</td>
<td>100.0</td>
<td>409,836</td>
<td>100.0</td>
<td>421273</td>
</tr>
<tr>
<td>Service</td>
<td>319,271</td>
<td>81.6</td>
<td>244,727</td>
<td>59.7</td>
<td>203872</td>
</tr>
<tr>
<td>Non-Service</td>
<td>71,906</td>
<td>18.4</td>
<td>165,109</td>
<td>40.3</td>
<td>217401</td>
</tr>
</tbody>
</table>

Average Damages Awarded in Design Patent Cases

For 1,197 cases, the injunction ratio was 81.5%.

Average Damages Awarded in UMP Cases

For 630 cases, the injunction ratio was 73.8%.

Average Damages Awarded in Invention Patent Cases

For 383 cases, the injunction ratio was 71.5%.
Compare this with the relatively low rate of less than 7% of patents issued to non-service patentees in the United States.\textsuperscript{36}

The survey of patent counsel undertaken as part of the research for this report revealed a variety of comments and experiences regarding patent trolls in China. While most said that their companies have not yet been targeted by trolls, they also believe that it is just a matter of time. All respondents said that there will be a significant increase in troll activity, particularly as the level of sophistication of the NPEs continues to grow. One chief patent counsel commented that trolls, indeed, concern her greatly as “people can play fast and loose with utility model patents in China.”

General consensus exists that there is a disproportionate number of troll cases in the telecommunications and computer and software industries. One company that has been hit by trolls found that the utility model patent upon which the charge of infringement was based was nothing more than a photocopy of a previously issued invention patent. Some have seen “legitimate” private patent practitioners join NPEs when other work is unavailable to assess patents and to develop a target strategy for using their unexamined, unevaluated utility model patents as weapons against others.

Patent counsel we interviewed concluded that troll activity will increase dramatically, driven at least in part by the low cost of initiating an action, the high incidence of injunction grants for UMPs (higher than for invention patents), and the growing comfort with patent litigation in China. Patent counsel also believe that NPE attacks are increasing fastest against Chinese entities and the very system designed to encourage individuals and startup companies to invent is, in the end, rapidly undermining real innovation.

In this regard, a review of granted injunctions and awarded damages over a period of time in China can be very telling. The data also illustrate that damages most variable are for invention patents. The highest infringement case-injunction ratio is for designs at 81.5%, for utility model patents at 73.8%, and for inventions at 71.5%.\textsuperscript{37} Accordingly, the data suggest that the real risk of junk patents is not damages (typically, not great) but, instead, is the injunction itself. (Note that the law permits Chinese companies to reincorporate to avoid injunctions, while foreigners have no such option.)

It is clear that some companies in China, both foreign and domestic, have not experienced the problem of the patent troll in China. But in the words of IP counsel for a Fortune 50 multinational, the troll in China is becoming more aggressive and has many opportunities to buy pending or issued patents. Purchases can be made from individuals who lack the resources to exploit the patent, from small companies in need of cash, and from universities under pressure to make money on the patents, either through licensing the patent or through its sale. At least from the perspective of this same IP counsel, the problem is on the rise, with some industries being hit harder than others.
CHINA’S INNOVATION STRATEGY: HANGING IN THE BALANCE?

China’s National Intellectual Property Rights (IPR) Strategy of June 2008 emphasized the importance of promoting “China’s capacity in creation, utilization, protection and administration of intellectual property” in a step toward improving China’s capacity for independent innovation. This reflects China’s ambition to move from being the factory floor to being a leader in innovation.

The push for indigenous innovation appears at all levels, including very clearly at the State Intellectual Property Office. In SIPO’s 2009 report, the very first substantive page included the following statement by Mr. Tian Lipu, Commissioner:

The year 2009 marks a very important year in the history of the country as well as an extraordinary year in the development of China’s IP system. Consistent with their actions in transforming the patterns of economic development by integrating sustaining economic growth and economic restructuring, boosting domestic demand and seeking advancement, governments at different levels placed IP at a more prominent position, strengthened efforts to nurture core technologies and competitive advantages of IP, and speeded up indigenous innovation and restructuring.38

As one might expect, many issued utility model patents in China would not withstand substantive examination: “As far as design patents and utility model patents which do not undergo substantive examination, … there has been a misguided effort … these patents that have been in formal compliance but are substantively invalid under the patent law.”39

Prominent Chinese officials acknowledge that many UMPs reflect imitation, not innovation. The majority of patent counsels interviewed felt that utility model patents in China are more likely to stifle innovation than to encourage it in the long run. In the words of one patent counsel of a multinational chemical company, UMPs only provide tools to “game the system.”

If a substantial part of China’s drive for innovation is based on numbers of utility model patents, of which at least half are junk, then the basis of the drive is faulty. The chief patent counsel of one company that was interviewed said specifically, “It may reach the point that if someone has a utility model patent in China then just ignore it. …” However, given the propensity of some entities to use UMPs to (1) defend themselves against infringement claims or (2) extract licensing or money from real innovators, these patents cannot be realistically ignored.

In view of the above, and the fact that both domestic and foreign companies find themselves overwhelmed by the sheer number of patents to be searched, and in the case of misleading abstracts, they find it sometimes impossible to search. These companies are forced to either spend a great deal more time and money in searching or give up and fail to search at all. The expenses related to clearance investigations can be enormous.
For example, assume that 400,000 UMPs are issued each year and further assume that for a given active and crowded technology 10,000 of these are potentially relevant, requiring a Chinese company to review each of these to do a product clearance. Assuming further that 90% (9,000) can be eliminated in two minutes of work each, 90% (900) of the remainder can be done in 10 minutes each, and 90% (90) of the remainder in 30 minutes each, and the balance (10) can be eliminated in two hours each, the total time required for this clearance of 400,000 issued UMPs would be more than 500 hours of work. Even at a bill of $100 per hour, this would result in $50,000 that the company would have to spend on just UMP product clearance for a single product for a single year of issued UMPs. These challenges will only increase as the exponential growth of utility model patents in China continues.

A COMPARATIVE ANALYSIS: LESSONS FOR CHINA FROM OTHER EXPERIENCES

In 2010 a total of 495,801 utility model applications were filed around the world. Of that 409,836 were filed by China. While the majority of utility model applications are filed in China, more than 50 other countries have utility model systems, including Germany, the Republic of Korea, Japan, and Australia. These countries have measures in place to minimize or avoid the problems that China is experiencing. Germany, with the second-highest number of utility models filed in 2010 behind China, has measures in place that avoid the negative outcomes experienced in China. Korea, in third place, also has built-in measures that are different from those in Germany but that nevertheless provide effective deterrents against utility model abuse. Of this group, Japan has the fourth-greatest number of utility models after China. This country also has measures in place to keep the potential known problems of utility models under control. These countries do not subsidize the filing of junk patents.

Utility Model Filings by Select Countries—2010

(Source: http://www.wipo.int/ipstats/en)
Australia is a good example of a country that recognized its utility model problems and undertook a major renovation of its system. These countries and their mechanisms that provide against utility model abuse follows:

**GERMANY**

A close look at Germany’s answer to the type of problems that China is experiencing with utility models is highly instructive, as China’s Patent Law is based on the patent laws of Germany. These laws include the Gebrauchsmustergesetz (the Utility Model Law) and the Gebrauchsmusterverordnung (the Utility Model Ordinance).

In 2010, Germany had the second-greatest number of second-tier invention applications after China. The German utility model, available for “technical inventions,” is also known as the Gebrauchsmuster (GebrM). Devices and compounds can be protected as UMPs under the law, but methods cannot.

The German utility model is a relatively inexpensive approach to protecting technical inventions that can be obtained quickly, typically within a couple of weeks. To obtain a utility model in Germany, the invention as claimed must be novel, include an inventive step, and be capable of industrial application. These are the same requirements as for a German invention patent. The German utility model has a maximum life of 10 years.

Like the Chinese utility model patent, the German utility model is not substantively examined prior to grant. In addition, and also like the Chinese utility model patent, the German utility model is normally registered with the claims as filed. The utility model is published within a few weeks after filing.

Germany has experienced a troll problem but not on a major scale. There are several reasons that the use of junk utility model patents in Germany against possible infringers is not an attractive business model.

Once registered, the file for a German utility model is available for public inspection. While no compulsory prior art search is performed, the applicant or any other party may request a prior art search by paying the search fee during examination.

In China, the utility model holder is not required to have a prior art search conducted before entering court. However, unlike China, the owner of the utility model has to provide evidence to the court that the utility model is valid. Accordingly, a novelty examination as well as an examination as to inventive step is ordinarily undertaken during litigation upon request. Chances of a utility model holder obtaining a preliminary injunction are very low.

Unlike China, the German court can consider both validity and infringement. In fact, the court, such as the Federal Patent Court, may have a different opinion than the Patent Office.
The holder of a clearly invalid German utility model is not likely to bring an action in the German court as the party will likely be forced to pay the court costs incurred by the accused infringer. The potential high cost acts as a deterrent to filing questionable actions.

The requirement for inventive step is the same as for invention, unlike China. The only difference is that for the invention patent, any disclosure before the priority date may be considered as prior art, whereas less prior art is taken into consideration in the case of the utility model. Specifically, neither public use abroad nor oral disclosure is regarded as prior art in the case of the utility model. (At one time, Germany had a lower inventiveness requirement for utility models, but this requirement was eliminated by the Supreme Court.) In fact, the inventive step requirement in Germany is higher than that of the European Patent Office (EPO), resulting in the revocation of many European patents by the German Patent and Trade Mark Office based on the same prior art as the EPO.

Also unlike China, where the winning party receives only partial reimbursement, in Germany, the successful party in an invalidation proceeding may claim full “reimbursement of costs.” This means that the owner of an invalid utility model may have to cover not only his own costs but also the costs of the winning party, creating a major deterrent to the improper use of junk UMPs. However, the reimbursement cost is limited by an official tariff for attorneys at law.

Potential damages for utility model infringement are not great. The low level of damages provides a considerable disincentive for aggressive action to the holder of a utility model. This is because the real costs related to the lawyer’s fees (regulated by statute and related to the amount in dispute) are often much higher than the ultimate court award, even where the utility model is shown to be valid and infringed. Accordingly, it is often the case that the patent troll would have to pay counsel more than the entire damage award. This, coupled with the need then for the utility model holder to execute the award, makes the transaction as a whole commercially unattractive.42

REPUBLIC OF KOREA

According to the Korean Utility Model Act, a “utility model” may be granted for devices that are “industrially applicable” and relate to the “shape or structure of an article or a combination of articles.” (Article 4(1)).

Unlike utility model patent prosecution in China, the utility model in Korea is required to undergo substantive examination prior to grant. This was not always the case. In 1999, Korea suspended the substantive examination of UMPs to reduce the burden on the Korean Intellectual Property Office (KIPO) and to increase developing and practicing lesser inventions. In 2006, however, the requirement for substantive examination of utility models was reintroduced. The reasons for the reversal included the finding by KIPO that the examination period of invention applications was being brought under control and the belief that the registration of utility models without substantive examination was “liable to produce unstable rights as well as wasteful disputes to nullify such rights.”43
The examination of an application for the utility model is made upon request by the applicant. (Patent Law, Article 12(1)) A request for examination may be made only “if a detailed statement specifying the scope of claims for utility model registration is attached to the application.” (Patent Law, Article 12(2))

Once a request for examination has been made, the application for the utility model is substantively examined by the Korean Patent Office. Grant of the application for the utility model shall be made “for devices that are industrially applicable and relate to the shape or structure of an article or a combination of articles” unless the device was “publicly known or worked in the Republic of Korea or a foreign country before the filing of the utility model application” or if the device was “described in a publication distributed in the Republic of Korea or in a foreign country before the filing of the utility model application or made available to the public through electronic telecommunication lines under Presidential Decree.” (Article 4, (1)) However, registration may still be refused where “a device could easily have been made before the filing of the utility model application by a person with ordinary skill in the art to which the device pertains.” (Article 4, para. (2))

While abuse of utility models in Korea by NPEs exists, the problem is not substantial because applications for utility models undergo substantive examination prior to registration.44

**JAPAN**

In Japan, the utility model is intended to protect the shape or construction of articles or a combination of articles. Methods cannot be protected by the utility model in Japan. At one time, Japan required substantive examination of utility models, but that step was eliminated in 1994 when the Utility Model Law was revised. Accordingly, utility model applications today are registered after having passed a formality check and a basic requirements examination. The time between initial filing and registration is about two or three months. Once registered, the utility model remains in force for 10 years after the filing date.

The most significant difference between the utility model patent of Japan and the utility model patent of China is the level of responsibility placed on the utility model right holder upon exercising the right. The Utility Model Law stipulates that the holder is obliged to use due caution when exercising the right. Specifically, the holder may not exercise his right against an alleged infringer unless, first, a Technical Opinion in which novelty and inventive step are evaluated (Utility Model Law, Article 29-2) is obtained from the Japanese Patent Office and, second, the alleged infringer is warned of the possibility of action by being presented with the Technical Opinion. These requirements help explain why fewer utility models are issued in Japan than in China as a percentage of filings. If the utility model right holder proceeds in an action without “due caution” by obtaining the Technical Opinion and giving a warning to the alleged infringer, he may be liable to provide compensation for damages incurred by the other party caused by such actions. (Utility Model Law, Article 29-3)
In addition, and also unlike China, most of the utility model rights in Japan are owned by corporations and not by individual inventors. These corporations are not in the habit of selling their utility models to NPEs. Thus, unless the troll develops the invention underlying the utility model, it is unlikely that he will obtain such a right.

As a countermeasure against potential abuse by holders of utility models in Japan, it is possible for third parties to invalidate a utility model right. If the third party succeeds in its efforts to invalidate the utility model right, the utility model holder bears liability for damages incurred by the enforcement of the right, unless the owner is able to prove that he was not negligent in enforcing the utility model right in Japan. 45

In Japan, it is generally difficult and even risky to enforce a utility model right, thus keeping in check the improper use and number of utility models issued in that country while maintaining a high level of quality.46

AUSTRALIA

From 1979 to 2001, Australia had a system of protecting utility models in which the patent had a shorter term but had the same inventive step as for the invention patent (the Australian Standard Patent). However, this approach was argued to have effectively eliminated an easily obtained patent with a lower level of inventiveness of the type often preferred by sole inventors and by SMEs. In response, in 2001, Australia adopted a system of innovation patents. The new system provides quick protection at a low cost and has the advantage of allowing inventors to protect incremental steps while developing a product or process. Introducing the innovation patent would make the patent system more accessible to more people.

The Australian innovation patent is available to protect new devices and substances. (Patents Amendment [Innovation Patents] Act, Section 18) To obtain an innovation patent in Australia, the patent applicant must demonstrate that the invention as claimed is novel over the prior art, is inventive (or nonobvious) when compared with the prior art, and has utility. In contrast, to obtain an innovation patent in Australia, the patent applicant must only demonstrate that the invention as claimed is novel, is innovative, and has utility. (Id.)

In the case of the innovation patent, the invention demonstrates an “innovative step” unless, “when compared with the prior art base … the invention would, to a person skilled in the relevant art, in the light of the common general knowledge as it existed in the patent area before the priority date of the relevant claim, only vary from the kinds of information set out in subsection (5) in ways that make no substantial contribution to the working of the invention.” (Id.)

The innovation patent in Australia does not undergo substantive examination. Once approved as to formalities, the innovation patent is granted, usually within about one or two months after filing.
The innovation patent in Australia protects methods and processes of the type that result in “concrete, tangible, physical or observable” effects.\(^47\) It has a term of eight years counting from the effective filing date. (Section 68)

While the innovation patent does not undergo substantive examination prior to grant, the owner of an innovation patent cannot rely on the innovation patent in an action against an alleged infringer in an Australian court until the innovation patent is examined by the Australian Patent Office and is certified. This examination may be requested anytime after grant. The request may be made by the patentee, a third party, or by the Patent Office. (Section 101A) The certification process ordinarily takes about six months, after which time the innovation patent is legally enforceable. Once certified, the innovation patent gives the patentee the same rights as the standard patent.

An interesting feature of the innovation patent system in Australia is that a patentee can revise the scope of the claims of a granted patent in order to have those claims read upon an infringing article or method until the time the patent is certified. (Section 102(2A)(b)) However, no new matter is to be claimed. (Id.)

Damages awarded by Australian courts for infringement of an innovation patent are very low, far lower than awards available in the United States or China. Moreover, if the infringement action is unsuccessful, costs are often awarded to the defendant.

The media in Australia tend to favor the defendant in such actions in response to a belief held in some quarters that patentees too often are abusive in asserting their patent rights. By these measures, the troll problem in Australia is kept under relative control, at least with respect to the innovation patent.\(^48\)

**WHAT CAN BE DONE? RECOMMENDATIONS FOR A PATENT SYSTEM THAT FOSTERS INNOVATION**

**FIRST STEP: DENY LESS, ACKNOWLEDGE MORE**

There are widely held opinions at all levels, both inside and outside of China, that the utility model patent system in its present condition is not serving its originally intended purposes. Within certain quarters of SIPO, however, the belief persists that all options to fix the system have been considered and rejected because the status quo is satisfactory.

Regulators around the world should occasionally undertake an internal review of their patent laws, implementing regulations, and procedures to make course corrections as needed. The United States is an example of a country that decided that the patent system was inefficient,
outdated, and in need of repair. That effort resulted in both legislative and judicial reform. China has amended its Patent Law three times since it was enacted in 1985 and a Fourth Amendment is now pending. Clearly, it is in China’s best interests to evaluate its options to overcome the deficiencies discussed in this report. Failure to make changes as soon as possible will allow the abuse of utility model patents in China to increase significantly.

In most countries, changes in patent legislation take time. China is no exception. The amendments enacted in 2009 began to take shape seven years earlier, shortly after the prior Patent Law amendments were made law in 2002. As a result, some of those changes were obsolete before they even became law. Given the urgent need for changes to utility model patent laws and practices in China, the sooner that SIPO officially recognizes that change is needed, the sooner they can be considered, planned, and implemented.

INTRODUCTION OF AN OATH OR DECLARATION

Currently, the patent applicant is under no duty to swear or affirm that he is the inventor of the invention embodied in either the invention patent application or the utility model patent application. Requiring an oath or declarations should lead a patent applicant to hesitate to file a utility model patent application knowing that he is not the inventor. This requirement may also (or alternatively) cause the applicant’s legal representative to hesitate to support such a filing. Another option along these lines would be a certification by the assignee making a similar statement.

SUBSTANTIVE EXAMINATION

By subjecting utility model patent applications to substantive examination before their approval, junk patents and the accompanying potential for abuse would be prevented. This substantive examination could match that undergone by invention patent applications or could be a modified version of a full examination. This approach would give credibility to the issued patent. Not only would the patent laws require a modification, but a substantial increase in the size of the examiner corps would be needed. This can only be regarded as a long-term measure.

CHANGES IN USE OF THE EVALUATION REPORT

The Patent Law provides that a utility model patent is granted in China following a review regarding informalities, as set forth earlier. However, the Patent Law also provides a mechanism by which the granted utility model patent can be substantively examined. (Implementing Regulations, Rule 56) The substantive examination results in an Evaluation Report.

The State Intellectual Property Office has identified the Evaluation Report as being a more thorough investigation than a Search Report but not as comprehensive as the substantive examination that takes place in the prosecution of an invention patent application. In the Search Report, relevant prior art supposedly is identified. In the Evaluation Report, the
supposedly relevant prior art is identified and applied to each claim. In the substantive examination of an invention patent application, the examiner searches the invention in the prior art, applies the art to each claim (as possible), reports the findings to the applicant (either directly if acting pro se or by way of the applicant’s appointed representative), and gives the applicant an opportunity to argue against any rejections, amend the claims, or both.

Insofar as utility model patents are examined only through an Evaluation Report, or in the case of invalidation by the Patent Reexamination Board, the standards as actually applied are not well understood and not consistently applied. There have been complaints, for example, of Examination Reports on issued utility model patents reflecting the same level of inventiveness as for invention patents, thus making it all the more difficult for the reviewer of an issued UMP to determine validity. This inconsistent treatment further undermines the predictability of the utility model patent.

Rule 57 of the Implementing Regulations specifies that the Evaluation Report is to issue within two months following receipt of the request for evaluation. The substantive examination is undertaken by an examiner of the State Intellectual Property Office in an art unit relevant to the technology involved.

The Evaluation Report attaches to the granted utility model patent and “[a]ny entity or individual may view or copy the Evaluation Report.” (Id.) Accordingly, if the holder of a utility model patent wants an assessment of the strength of his utility model patent prior to, for example, bringing a court action against an alleged infringer, he may first seek the Evaluation Report.

While the Evaluation Report serves a limited role, it can be used much more effectively in reducing the number of junk patents. These functions include the following:

- **Require the preparation of an Evaluation Report before the patent is granted.** Like a move to substantive examination, this change in use of the Evaluation Report would require a change in patent prosecution procedures and an amendment to the patent laws. This measure would also encumber the already overworked patent examiners at SIPO. It is more likely that this measure is long term. However, the expenses involved in hiring more examiners could be offset by charging the applicant for evaluation.
- **Require the preparation of an Evaluation Report after the grant of the patent but before a complaint is filed in which the utility model patent is a patent-in-suit.** It is not mandatory that a court require the Evaluation Report before a complaint is filed, although it is common for courts to stay proceedings until the Report is generated. By making the Evaluation Report mandatory, some degree of unpredictability of the validity of the utility model patent would be eliminated. This change would be at the judicial level and should not be difficult to implement.
SUBMISSION OF A SEARCH REPORT

As an alternative to requiring SIPO to undertake an Evaluation Report prior to grant, a Search Report issued by a recognized International Searching Authority (ISA) on the same utility model patent could be submitted and possibly evaluated prior to grant of the patent.

THIRD PARTIES TO COMMENT

Once the utility model patent is issued, the public could be given the opportunity to introduce relevant prior art into a publicly available file. According to this procedure, there would be no additional burden placed upon SIPO other than a simple administrative step. This procedure would enable those threatened with a charge of infringement to have an estimation of the validity of the utility model patent and to act accordingly.

CHANGES IN DAMAGES

Chapter VII of the Patent Law, titled “Protection of Patent Right,” sets forth that damages may be granted to a patentee for patent infringement. Three changes should be considered to deter abuse of the utility model patent right:

• Either SIPO or the courts should provide a penalty in the form of nullifying the patent and damages against patent applications submitted in bad faith, such as where the application is nothing more than a copy of prior art or where prior art exists that would destroy the validity of the patent.
• Allow damages and recoupment of legal expenses where the utility model patent holder brings a frivolous lawsuit.
• Under the current Patent Law, the same damages are allowed for both invention patents and utility model patents. Because a utility model patent, by definition, should represent a lesser technical achievement than the invention patent, the penalty for infringing the utility model patent should also, by definition, be lower. Damages should be apportioned accordingly—that is, the cap should be higher for invention patent infringement and lower for utility model infringement.

SEPARATE OPPOSITION PROCEEDING FOR UMPS

As discussed earlier, a utility model patent may be invalidated by the Patent Reexamination Board. These proceedings are relatively slow and expensive. Use of the Patent Reexamination Board for the invalidation of a utility model patent is further burdened by the misapplication of standards of inventiveness for invention patents to utility model patents. By having separate bodies review these different patents, the likelihood of misapplying standards would be eliminated.
SUBSIDIZATION OF UMPS

Applicants for utility model patents are subsidized to one extent or another by different levels of government. This policy, while beneficial to society by helping individuals and small companies advance their legitimate technologies, unfortunately also encourages the filing of utility model patent applications that should never be submitted. Eliminating the cash incentive would reduce the number of junk patents issued and the damage caused later by the wrongful use of these patents.

INVALIDATION PROCEEDINGS

As mentioned previously, the party seeking invalidation of the utility model patent is limited to citing a maximum of two references per claim. By modifying invalidation proceedings to allow the party seeking invalidation to include more than two references per claim, a higher invalidation rate would be achieved due to obvious combinations of known technology.

CONCLUSION

The strengths and weaknesses of the utility model patent system in China are known. When the utility model patent was introduced as part of the then-new Chinese Patent Law in 1985, it was seen as a device of limited purpose. Those who drafted the law in the late 1970s would not recognize the utility model patent today and some of the ways it has been applied. Certainly, they would not approve of the improper uses of these patents. There are avenues that China can take to remedy the situation and successful models built by other countries that can be followed. A course correction would be in China’s best interests and advance its quest to generate more indigenous innovation. It would also benefit the world patent community.
ENDNOTES

1. This report is the result of research on and review of China’s Patent Law, the Implementing Regulations of the Patent Law, the Examiner’s Manual, issued utility model patents, and relevant articles and papers. In addition, in-depth interviews were held with patent counsel of more than 20 Fortune 500 companies who have personal experience with utility model patents in China. Interviews were also conducted with patent practitioners in various jurisdictions and officials in their respective patent offices.


4. See, for example, Application No. 201020162379 related to an encryption system and Application No. 201020236214 related to an anti-theft and anti-disclosure system for computers.

5. But this very advantage also contributes to the weakness of the UMP: “Utility model patents are particularly popular with domestic applicants because they are easier and faster to prepare, do not undergo substantive examinations before being granted, and cost less. For these reasons, utility model patents may intrinsically be of substandard quality.” Zhou, Eve, and Stembridge, Bob, Patented in China–The Present and Future State of Innovation in China, Thomson Reuters, 2010, 21.

6. Disclosed to author by interviewed patent counsel of U.S. Fortune 100 chemical company.

7. Of the utility model patents issued to domestic applicants, about half were issued to individuals.


12. Disclosed to author by interviewed Chinese patent lawyer whose client was threatened with closure.


14. See, for example, utility model patent ZL200520124981.7, which is a literal copy of the earlier granted utility model patent ZL02270703.4. (Mak, Toby CIPA, April 2011, p. 235).


17. Comment made to author, Beijing October 2011.

18. See note 15.

19. Id.


21. Id.

22. Ironically, this is contrary to the right actually given the patentee, which is the right to keep others from practicing the patented invention. (Taken one step further, and rendering the mistake of the “right to operate” belief even more inaccurate, a patentee may not be able to practice the invention of the patent if it interferes with the patent of another.)


24. Id.

25. Since the establishment of the Innovation Fund of the Ministry of Science and Technology in 1999, more than 20,000 SMEs received approximately 10 billion RMB.

26. Some argue that massive government incentives contribute to the filing of junk patents. Chinese government officials say that the incentives are only for invention patents. However, there apparently is no known official writing or other evidence to confirm this is the case.

27. See note 16.

28. See note 15.

29. Id.

30. See note 11.

31. Compare this with the invalidation of an invention patent, where virtually any number of references may be cited.

32. Fordham University Professor Carl Minzner discusses the trend of judicially driven mediation and other forms of ADR in his article “China’s Turn Against Law,” American Journal of Comparative Law, 2011; Washington University in St. Louis Legal Studies Research Paper No. 11-03-01. He notes, “Chinese authorities … are turning away from trials and adjudication according to law. Top Party political-legal authorities are promoting mediation as the key to resolving all disputes. They have linked it to the Party’s new ‘harmonious society’ political doctrine, enshrined as central policy in 2006.”
33. See note 15.


35. Disclosed to author by interviewed patent counsel of U.S. Fortune 100 technology company (“The troll in China is at least unbiased—foreign and domestic targets are treated equally”).

36. See note 15.


39. Id.


41. Utility Model Law, Article 1 (1).

42. The author wishes to thank Dr. Anja Zimmermann, Ascenion GmbH, Munich, Germany (www.ascenion.de) and Dr. Andreas Vögele, Schwarz & Partner, European Patent & Trademark Attorneys, Vienna, Austria (www.kopas.at) for their contributions to this section.


44. The author wishes to thank Dr. Min Son, HANOL Intellectual Property & Law office, Seoul, Korea (www.hanollawip.com) for her contribution to this section.

45. See note 13.

46. The author wishes to thank Junichi Tsuruta, Seiwa Patent & Law Office, Tokyo, Japan (www.seiwapat.jp.co) for his contribution to this section.”

47. Grant v. Commissioner of Patents [2006] FCAFC 120, 30.

48. The author wishes to thank Mr. Narly Kalupahana, AJ Park, Auckland, New Zealand (http://www.ajpark.com) for his contribution to this section.

49. “Where any infringement dispute relates to a patent for utility model or design, the people’s court or the administrative authority for patent affairs may ask the patentee or any interested party to furnish an evaluation report of patent made by the patent administration department under the State Council after having conducted search, analysis and evaluation of the relevant utility model or design, and use it as evidence for hearing or handling the patent infringement dispute.” Patent Law, Article 61. However, the Evaluation Report is not necessarily binding in an infringement. See note 14.