China's Government-Set Patent Targets and Performance Indicators: Boosting Numbers or Innovation?

Prud'homme, Dan

2012

China's government-set patent targets and performance indicators: boosting numbers or innovation?[+]

Dan Prud'homme[*]

August 2012

Abstract: This paper uncovers over 10 central level and over 150 provincial/municipal level patent targets, mostly to be met by 2015, within a wide range of Chinese policy documents. The analysis suggests there are weaknesses in certain targets due to the absence of important criteria for ensuring patent quality. Further, the overly heavy focus on just a few types of quantitative patent targets (e.g., for patent applications and patents granted) overshadows the type of benchmarking that better reflects conditions stimulating creativity as well as the actual economic, social, and environmental relevance of the underlying inventions – i.e., their ability to be transformed into something useful and thus constitute innovation. And this is compounded by various regulatory and institutional factors in China. It is also compounded by the fact that the government has instituted performance evaluation systems for SOEs and other enterprises, Party/government officials, universities and research institutes, and other entities which also appear overly based on these targets. Given these risks, it is important to re-think these approaches as ways to stimulate innovation in China.

Keywords: China, patent targets, patent performance assessments, innovation metrics, patent quality, patent quality metrics, invention, innovation

[+] This paper is Chapter 2 (with a new title) of Prud'homme, D. (2012) *Dulling the Cutting Edge: How Patent-Related Policies and Practices Hamper Innovation in China*, European Union Chamber of Commerce in China Publications

[*] Manager, IPR and R&D groups at European Union Chamber of Commerce in China

Ⅲ.2 Chapter 2: Government-set patent targets and indicators

Ⅲ.2.1 Analysis

Ⅲ.2.1.1 Sub-section 2.1: Patent-specific targets and indicators

Introduction: This sub-section explores how the system of a vast amount of patent-related goals China has set out at the national-level and more so at the provincial/municipal level likely do not best allow the authorities to meet their aims of stimulating future patent quality and innovation in China. The analysis concentrates on quantitative patent targets set out in a range of policies, as well as patent indicators in performance evaluation assessments for a range of entities.

Ⅲ.2.1.1.1 Quantitative patent targets

Nationwide and provincial/municipal targets

Although also the subject of policy initiatives previously, in the last few years China has released an increasing number of policy plans to encourage patent filings. These policies are promulgated at both the national and provincial/municipal levels.

In the major recent national-level policies reviewed, China has set-forth over 10 different quantitative patent targets for the next several years. Some of these targets include:

- The *S&T MLP* sets the goal for China to be among the top five countries in the world in terms of annual invention patents granted to Chinese nationals by 2020.[1]
- China's nationwide *12th Five Year Plan* sets the target that "invention patents owned should be increased from 1.7 to 3.3 per ten thousand people by 2015."[2]
- The *SC Notice on IPR in Strategic Emerging Industries* sets out targets that by 2015 the number of invention patents owned and international patent applications in strategic emerging industries will be tripled compared to the figures in 2010.[3]
- The most overarching of China's patent-specific development plans is the *NPDS*, mentioned in the Introduction section, which sets a number of ambitious goals in patent development, including for China to file 2 million annual patent applications by 2015 (other targets from the *NPDS* are outlined in the "Chapter 2" section in the Annex).

In addition to the recent national-level patent development policies, China's provinces/municipalities have collectively set over 150 region-specific quantitative patent targets for the next several years, mostly 2015, in the major recent policies reviewed in this study alone. Many provinces/muncipalities have their own Provincial/Municipal *Intellectual Property (IP) Strategy*, or an equivalent, which usually also contains quantitative patent-related targets. Many provinces/municipalities throughout China also have, or instead of the aforementioned IP strategy have, their own *12th Five Year Intellectual Property Plan*, or science and technology plan, or equivalent, which usually always contains quantitative patent-related targets. Additionally, although

[1] See Part II, Section 2, para. 3. Note: among other targets, the *S&T MLP* also sets the target of having the number of international citations of scientific papers written by Chinese nationals to be among the top five countries in the world.
[2] See Chapter 1, Section 3, para. 4.
[3] See Part 2, Section 2

not reviewed at length in this study, it appears some cities/localities also have somewhat similar overarching policies to implement the provincial/municipal plans and strategies. (The "Chapter 2" section in the Annex provides an extensive listing of the patent-related targets from official policy documents reviewed for this study.)

In addition to these quantitative targets, Chinese authorities and other government/quasi-government institutions have set a range of less specific patent-related targets. For example, Part 6, provision 69 in the *2012 National IP Strategy,* formulated by the Chinese Academy of Sciences (CAS), states that "*IP output targets and criteria of applying results"* will be formulated for *"select major strategic pioneering projects."* Some of the provincial/municipal plans reviewed contain non-quantitative targets, usually in addition to, although sometimes instead of, quantitative patent targets.

Minor concerns over details in certain targets

As illustrated by statistics in Chapter 1 and the "Chapter 1" section in the Annex of this study, by no means are all patents filed in China actually granted (roughly less than half are), let alone turn into commercially viable products or processes or otherwise have notable value and remain in-force over an extended period of time – thus overly basing an innovation strategy on patent applications overlooks the serious weakness of such an indicator in China to measure innovation. Many patents are filed although application or other fees are not paid, and so while the patentee actually receives a patent application number the patent is soon invalidated.[4] In fact, many patents are abandoned somewhere in the application process, for example a significant amount of invention patents are abandoned before the Substantive Examination phase as their filers realise they are based on unviable products or processes.[5] Further, patents can be denied for any number of reasons during the application process prior to registration, or can be successfully challenged as infringing and invalidated after registration. Additionally, and very importantly, patents that are successfully registered are invalidated if rights owners do not properly pay patent maintenance fees. There are also other reasons certain patents registrations do not result in valid patents – for example, utility model and invention patent applications can be filed on the same solution, one can obtain the utility model first, and then when/if awarded the invention patent can abandon the utility model for the invention patent.

Collectively, most of the IP plans and IP strategies (when hereafter referred to collectively, the reviewed IP plans, strategies, and equivalent policies and implementing measures are called "proposals")[6] set targets not only for patent applications but also patents issued/granted; however, this is not always the case. Most of the proposals set targets for patents issued/granted and therein set specific targets for invention patents issued/granted in addition to the quantitative targets simply for patents (inferably inclusive of invention patents, utility models, and design patents). Some provinces/municipalities, like Tianjin, even set particularly solid targets therein (see Table 11, and see the "Chapter 2" section in the Annex for other solid targets set out by different provinces/municipalities). However, other proposals, for example Hebei's, do not mention targets for granted patents, but only those for patent applications, which is problematic in so much as subsequent implementing measures are based on these targets rather than at least also on granting rates (see Table 11 for these targets).

[4] Patent fees must be paid within two months after a patent is filed (Source: SIPO. (2008, March 19). *Instructions on patent fee payment*. Retrieved from http://www.sipo.gov.cn/zlsqzn/sqq/zlfy/200804/t20080422_390241.html)

[5] Whereas Gao et al. (2011), p. 17, finds that between 2001 and 2010 the average granting rate for invention applications that underwent Substantive Examination was 64.4% (thus around 36% did not).

[6] Only if there is a weakness in a province's/municipality's IP plan not compensated for by its IP strategy or another measure, or vice versa, than such weakness is highlighted herein.

A few other arguable weaknesses are present in the recent provincial/municipal IP proposals. While many of the proposals appear to set indicators for "patents in-force" or an equivalent, which as explained in the Introduction and Chapter 1 is a key indicator of how and if patents are being utilised and in-turn is a proxy for the value of the patents, this is not always the case in all proposals.[7] While most of the plans mention improving the dispute settlement frameworks (e.g. in terms of administrative enforcement and transfer of criminal cases), and some record their progress (even quantitatively) on completed IPR disputes/infringement cases over the past 11th Five Year Plan period – most do not set any type of quantitative future indicators for reducing infringement to supplement their other quantitative targets. Nor do the plans specifically mention potential 'double-counting' of utility models later abandoned for invention patents in meeting their quantitative targets. These are arguably weaknesses in the plans.[8]

Table 11: Example targets from major recent IP proposals reviewed

Province/ Municipality	Name of proposal	Patent targets
Hebei	*IP Plan issued in 2011*	*Targets by the year of 2015:* • Annual patent applications = 25,000 • Patent applications ≥ 12% annual growth rate • Annual invention patent applications = 8,000 • Invention patent applications ≥ 15% annual growth rate
	IP Strategy issued in 2009	*Targets by the year of 2013:* • Patent applications ≥ 15% annual growth rate • Annual patent applications ≥ 20,000
Tianjin	*IP Strategy issued in 2010*	*Targets for the following 3 years:* • The total number of patent applications ≥ 200,000 • The total number of valid patents ≥ 40,000, with valid invention patents accounting for 1/3 of the total number of valid patents • The proportion of valid patents to account for over 60% of total patents of enterprises • The number of enterprises owning patents to be 5,000 • The total number of foreign patent applications to be 1,000

Source: Author's selection of patent targets from provincial IP plans and strategies. Note: a longer listing of patent targets set by provinces/municipalities can be found in the "Chapter 2" section in the Annex.

Larger concerns with the targets

Patent targets, if well crafted, in themselves do not necessarily undermine a strategy to build up patent quality. However, concern does arise depending on how stringently these targets are used and, in a related vein, to what extent they are emphasised, to guide policy meant to boost patent quality and innovation.

The most fundamental problem with what appears to be a quite heavy focus on quantitative patent-related targets in China is that it overshadows the type of benchmarking that better reflects the nuances that underlie creativity, which is the fundamental building block of quality patents, highest-quality patents in particular, and innovation at large. Unlike the export-led and investment-led

[7] One reason for this could be the newness of readily available data for this indicator, whereas not until 2009 did the National Bureau of Statistics create "patents in-force" as a new indicator in the Bulletin of Economic and Social Statistics, and only in 2010 was the indicator used in the China Statistical Yearbook.

[8] Also, it is worth noting that a number of provinces do not yet have a recently promulgated and publically available core IP plan or strategy. Regions in the former category include Inner Mongolia, Jilin (although a city plan is publically available for Changcun, Jilin which notably only mentions targets for patent applications and none for patents granted), and Tibet.

growth model founded on lower-end products and certain targets that has to date impressively driven China's economy, building highest-quality patents and breakthrough innovation requires a significantly different type of policy thinking. One cannot force' creativity, but rather nurture it, whereas creativity leading to breakthroughs of the type that typically produce the highest-quality patents at best come in spurts, and are most often only realised in the mid- to long-term through a range of solid inputs. The risk-taking and creative development process underlying highest-quality patents may not provide the short-term 12-month (a target time period stipulated in annual IP work plans reviewed for this study, which are meant to implement the longer term IP proposals) or even several-year patent outputs (a target time period proposed in many IP proposals reviewed in this study) needed to meet these targets. As such, overly focusing on ambitious quantitative patent targets arguably detracts efforts needed to nurture a culture that will produce highest-quality patent-worthy breakthroughs and innovation at large by valuing patent quantity too highly. This of course does not at all mean this emphasis will not effectively boost the *quantity* of patents, which it in fact may do quite effectively.

In the same vein, it is worth pointing out that absolute numbers of patents are only one indicator, and an imperfect one at that, of the actual economic relevance of certain solutions, and as such what appears to be China's overly heavy focus on patent targets instead of a more dynamic gauging of a range of innovation-relevant targets may not optimally, or at worst distortedly, foster innovation in China. Overly focusing on patent targets overshadows measurements of certain inputs and other forms of creative-environment development that are essential to developing highest-quality patents and innovations. Further, overemphasis on absolute numbers of patents does not appropriately capture the actual potential for patented inventions to be transformed into something useful and thus constitute an innovation. This is certainly not to say that China is not instituting parallel measures outside the patent-related measures to measure innovation inputs or other measures to encourage creativity, which they certainly are (for example, authorities have set R&D metrics, goals for educational spending, and so on, some of which are discussed in the performance evaluation assessments mentioned in the next section). However, in the judgment of this study, given what appears to be their centrality and emphasis in innovation policy at large, there is room to be concerned that there is an overly heavy focus on patent targets.

Further, China's approach to innovation based on what could be called a "Soviet-style" [9]/highly state-orchestrated system of patent targets is not ideal given the still developing nature of its regulatory and institutional framework, which detracts from realising the policy objectives that underlie the targets. Introducing strict quantitative patent targets can put a type of pressure on implementing government ministries, as well as enterprises and others falling under the purview of such targets, to perform 'no matter what' to meet the targets. This pressure is particularly problematic in China, whereas given the still developing nature of its institutional and regulatory system, it is quite plausible for some entities to skirt appropriate monitoring and evaluation, IPR enforcement, and other quality control mechanisms in order to ensure they meet the aforementioned targets. As such, while the quantitative patent targets may ultimately be reached through these means, the ostensible underlying policy objectives of the targets to sustainably build innovation capacity and quality patents in China are undermined.

Additionally, the negative consequences of not meeting the underlying policy objectives is compounded by the fact that, given the overemphasis on patent targets in the first place, there are less than adequate 'back-up' methods to mitigate these consequences. Herein, a more dynamic focus on a range of relevant innovation targets would be a better 'back-up method,' and is

[9] Interestingly, some of the provincial/municipal IP plans and strategies reviewed for this study explicitly mention the Soviet Union in certain provisions.

contingent on the strength of other initiatives like the patent-based performance evaluation assessments mentioned below in Section Ⅲ.2.1.1.2.

Another concern with China's emphasis on patent targets is that they might be tied to certain discriminatory policies and practices to meet such targets. This may discourage foreign companies from using highest-quality patents and conducting certain innovation in China. (See Chapter 3 for details herein).

It is worth noting that while some countries in the EU, for example Bulgaria, which is a developing country, [10] set some quantitative patent-related targets at present, neither the number, ambitiousness, nor the weight given to such targets in actually encouraging innovation appears to be anywhere near the level of that in China.[11] China is comparatively quite different in this regard.

Ⅲ.2.1.1.2 Patent-based performance evaluations for universities and research institutes; SOEs and other enterprises; Party officials and other individuals

Details of the evaluation mechanisms

A variety of patent-based indicators have been established by the Chinese government for evaluating the performance of Chinese research institutes and universities; SOEs and other enterprises; and key Party officials and other government employees. Recent national-level measures have set-forth IP components in performance evaluations. Also, a wide-range of major recent provincial/municipal IP proposals set forth a number of performance evaluation assessment mechanisms for a variety of actors. The analysis below briefly looks at some of these proposals.

It is first worth commending certain authorities for setting forth solid patent-based performance indicators that are indeed likely to encourage highest-quality patent filings in China. For example, certain major national-level initiatives have emphasised the importance of IP quality and the market value of IP in performance evaluations, e.g. Part 3, Article 2 of the *SC Notice on IPR in Strategic Emerging Industries* finds that *"…We shall gradually increase the weight of intellectual property quality and market value in related assessments and evaluation…"* Also, it is clear that a number of provinces/municipalities have clearly set up solid performance evaluation mechanisms to build patent quality. For example, as illustrated in the "Chapter 2" section in the Annex, a number of recent provincial/municipal IP proposals reviewed for this study have particularly strong performance evaluation assessments for boosting patent quality given their focus on invention patent development; R&D investment; industrialisation, commercalisation, and transformation of patents; high-tech enterprise development including patents; among other components (for some solid examples herein see the plans of Liaoning and Zhejiang).

To illustrate some of the different types of patent-related performance evaluation mechanisms set out in provincial/municipal IP proposals (in addition to those listed in the Annex), see Table 12 below:

[10] International Monetary Fund [IMF]. (2011, April). *World economic outlook report*. Retrieved from http://www.imf.org/external/pubs/ft/weo/2011/01/pdf/text.pdf

[11] Bulgaria has set an indicator for "Number of patents and industrial designs defended before the European Patent Office," measured via number of certificates issued, and targeted to move from 9 to 30 by 2020. (Source: Bulgaria's national research strategy 2020. Monitoring indicators, p. 33. Retrieved from http://www.mon.bg/opencms/export/sites/mon/en/top_menu/science/national_research_strategy-2020.pdf)

Table 12: Example IP indicators in performance evaluations in recent IP proposals

Province/Municipality	Performance-evaluation targets
Hainan	Section 4, Part 3: *"… Make the obtainment of indigenous IPR the most important prerequisite for the examination and acceptance of project planning for important science and technology project planning and innovation platforms. Gradually establish an IPR examination and development system for Hainan's important science and technology innovation projects. Incorporate indigenous IPR output quantity, quality, implementation benefits, and IPR system construction conditions into the project evaluation index system and conduct supervision and management of the system."* Section 4, Part 5: *"Further improve the assessment of patent work; consider patent work performance as one of the necessary conditions for performance evaluation of corporate technology centres, high-tech enterprises and hi-tech industrial parks. Incorporate the management performance of patent work, including the amount of R&D investment, the quantity and quality of patents, patent transformation, patent transfer and patent licensing, into the annual performance management assessment indicators for the relevant administrative departments, encouraging innovation."*
Jiangsu	Section 4, Part 2, Para 1: "*Strengthening catalogued evaluation on invention performance of universities and institutes, and obtaining original patents should be the key elements of evaluation of basic research and cutting-edge technology research, obtaining invention patents and utility models should be the key elements of evaluation on applied research, developed research…improving the patents grant and rewards system, enacting 'Measures on Patent Rewards in Jiangsu Province' to stimulate inventing and improve patent quality."*
Tianjin	Section 5, Article 3: "*Incorporating the work performance of intellectual property into the performance evaluation index system of Party and government leading cadres and the persons in charge of SOEs."*

Source: Author's selection of articles from according provincial/municipal 12th Five Year IP Plans (promulgated in 2011). Translations are from the European Chamber thus are unofficial.

While, as mentioned, several of the IP proposals reviewed clearly set forth solid performance evaluation mechanisms to build patent quality, it is still at least worth seeking assurances from the many different relevant authorities across provinces/municipalities in China about the impact of their performance evaluation systems. Specifically, it is worth discussing if and how their performance evaluation mechanisms will best discourage development and subsequent filing of low-quality patents and encourage patents of relatively higher quality that are most appropriate for their particular region at their current stage of development. There are worst case scenarios that deserve attention. Some of the patent evaluation criteria reviewed, at least if unmodified by other measures that would otherwise strongly boost patent quality, may overly encourage the filing of utility models on solutions of the lowest inventiveness as an 'easy' way to meet the indicators. If not crafted and implemented properly, some patent performance indicators may actually raise the opportunity cost for developing and filing highest-quality patents, making it even less costly to just develop and file low-quality patents. Also, if these indicators, for example those on "*indigenous IPR*" are linked to overly burdensome and/or unreasonable preconditions for participating in innovation building, for example as mentioned in the section in Chapter 3 on "INP IP," they can discourage development of quality patents.

As a note, it appears that the IP proposals reviewed in this study contain limited if any repercussions, even generally, for poor performance or proliferation of low-quality IPR, patents included. This would seem to be an important disincentive to try and 'sneak through' performance reviews with low-quality patents, or at least those with less than desired thresholds of quality. While it seems likely that these repercussions could already be included in forthcoming implementing measures of the IP proposals reviewed, if not they should be included.

SASAC-specific performance evaluations for SOEs

As noted in Chapter 1, while on one hand it could be argued that Chinese SOEs in recent years at least do not file insignificant amounts of patents, they could certainly be filing more patents, particularly more invention patents instead of design patents and utility models. Chinese SOEs arguably should be producing better figures herein given the level of financial and other support they enjoy from the government in an attempt to make them innovative and competitive.

As illustrated in the "Chapter 2" section in the Annex, the government has set patent indicators for SOEs, which are overseen by SASAC. While this is not the first time SOEs have been encouraged to file patents, as for example the Central Committee's 1999 decision on SOE reform also encouraged SOEs to "develop products with their own indigenously owned IPRs,"[12] today's SOEs must meet what appears to be binding performance evaluation indicators for numbers of patents, including patent filings.

It is worth pointing out that SASAC's patent development guidance links patent performance to concrete developments in specific sectors. For example, several catalogues recently promulgated by SASAC and other ministries require development and commercialisation of products in innovative or otherwise high-end industries like clean and energy efficient power generating facilities and high-precision metallurgical equipment (in addition to lower end industries).[13] As listed in the "Chapter 2" section of the Annex, measure 13 of the *2012 National IP Strategy* advocates for improvement in SOEs' IPR risk precaution alerts which, while not fully clear from the language, may be exclusively related to strategic industries.[14]

What types of patents does the system foster?

It may be difficult for all SOEs to meet the patent indicators imposed upon them given that, despite some exceptions, Chinese SOEs at large have historically not been structured to focus on building quality patented innovations, particularly breakthrough patented innovations. According to Chan and Daim (2011), Girma and Gong (2008a), and Girma and Gong (2008b), given top executives in Chinese SOEs are appointed by the government and their performance is based on building their political careers, SOEs' operations in effect tend to focus on short-term performance rather than risky longer-term investments in R&D and innovative building.[15] Further, Guan et al. (2006) and

[12] Fourth Plenary Session of the Fifteenth Central Committee of Communist Party of China. (1999, September 22). *Decision of the Central Committee of the Communist Party of China on Major Issues Concerning the Reform and Development of State-owned Enterprises.* Retrieved from http://cpc.people.com.cn/GB/64162/71380/71382/71386/4837883.html.

[13] For example, see the *Catalogue Guiding Indigenous Innovation in Major Technology Equipment* for MoST, MoF, MIIT, and SASAC, December 2009; and MIIT, MoST, MoF, & SASAC. (2012, February 22). *Indigenous Innovation Guidance Catalogue of Large Technical Equipment*. Retrieved from http://www.miit.gov.cn/n11293472/n11293832/n12843926/n13917042/14471328.html

[14] Part 2, measure 13: "*"Support central state-owned enterprises to search IP information and analyse patent information in certain fields around the burgeoning strategic industries, establish a mechanism for IPR infringement alert and risk precaution within the central state-owned enterprises step by step. (SASAC, SIPO)".* Note: Part 6, measure 67 of the measures state: *"Promote central state-owned enterprises to fully implement IP strategy, improve the system for IP management in enterprises. (SASAC, SIPO)"*

[15] Chan and Daim (2011); Girma and Gong (2008a); and Girma, Sourafel, Gong, Yundan (2008b)

OECD (2007) find that overall, despite some exceptions, Chinese SOEs are not particularly efficient in knowledge production. As illustrated in Chapter 1, using 2009 as a proxy year (given lack of readily available data for other years), 65% of patent applications from medium and large-sized Chinese SOEs are for utility model and design patents, whereas only 35% are invention patent applications.

The aforementioned lack of innovation capacity is likely exacerbated by the lacking capacity of patent professionals in SOEs. Specifically, sources suggest there is a lack of patent agents, patent engineers and other patent-related professionals in SOEs.[16]

Given this context, it is worth further investigation with the authorities if the patent indicator-based SOE evaluation criteria and related mechanisms may encourage SOEs to develop solutions and file patents of less-than-desired quality in an attempt to meet the indicators. This is important to ensure the criteria and evaluation mechanisms deter SOEs from such behaviour.

In the same vein, it is also worth discussing if and how SASAC's performance evaluation mechanisms are linked to certain other policies, and the impact of this linkage on patent quality. For example, it is worth seeking assurances from SASAC that the performance evaluation system does not in any way encourage the government to grant preferential access to prioritised examination of patents for SOEs (see Chapter 4 on green channel applications) that would mean foregoing appropriate review of the patents, and result in granting of some low-quality patents that would not be granted in the absence of such a mechanism. It is also worth investigating the exact initiatives to build "*indigenous IPR*" as mentioned in performance evaluation criteria (see the "INDP IP" discussion in Chapter 3 for further information on this issue.)

MoST's and government-funded S&T organisations' performance evaluations

Without more readily available information, the exact impact on patent quality of program evaluation methods of the Ministry of Science and Technology (MoST) and other government S&T-promotion entities is not fully clear; however, there may be reason for concern, and thus clarity on these issues should be sought from the authorities. Sources suggest MoST has established patent-based key performance indicators (KPIs),[17] which by themselves are not necessarily concerning but might be depending on how they are linked to S&T funding and tax policies jointly promulgated by MoST and other agencies. It is worth exploring if and how performance evaluations instituted by the National Natural Science Foundation of China (NSFC) and other official S&T-promotion agencies in China are structured, and if they most efficiently and effectively utilise resources to spur quality patents, and specifically highest-quality patents, and innovation at large.

SIPO-specific performance evaluations

It is widely know that SIPO has internal performance indicators linked with how many patents its workforce approves, and the good work of SIPO in fine-tuning its internal processes to stimulate better quality patents deserves to be well recognised. SIPO's performance indicators are inferably organised towards meeting the *NPDS* and other patent-related policy indicators mentioned previously. Herein, patent reviewers are under significant pressure to meet certain performance indicators. Sources suggest SIPO is taking work performance seriously, whereas a 60 person task force comprising many of SIPO's most experienced examiners has been set-up to monitor the quality of work of individual examiners, teams, and full departments via random checks. Poor performance is met with a potential salary reduction for individuals and even the group he/she works in, creating

[16] Gao et al. (2011), p. 74

[17] Yeo, V. (2011, September 30). Public policy aids tech innovation but not silver bullet. *ZDNet News.* Retrieved from http://www.zdnetasia.com/public-policy-aids-tech-innovation-but-not-silver-bullet-62302301.htm

an important incentive to do quality work. Apparently, examiners are not awarded every time they approve a patent.[18] Meetings with SIPO indicate that they employ 6,000 people, and realise the need to double the amount of staff over the next three years to keep up with the increase in patent applications.[19] These are highly commendable management initiatives.

Further discussions could be held on certain details of SIPO's management structure. Additional details could be sought from SIPO on the exact workings of their performance criteria for 'first-line' and PRB examiners. It would be helpful to be privy to a presentation on how the indicators are most effectively discouraging examiners from approving low-quality patents that should be invalidated, and best rewarding those reviewers that work efficiently and effectively in approving deserving patents.[20]

Performance evaluations for intermediary services

It is worth discussing with the authorities the effectiveness of specific efforts to improve the performance of patent intermediary services in China, i.e. patent agencies and their patent application writers, and patent application writers not affiliated with patent agencies (all such individuals are external to SIPO). This is important given the well-known problems with patent intermediary services in China, including the poor writing of patent application documents and poor translations from foreign languages to Chinese therein, as well as general issues concerning the experience and technical level of the patent writers.[21]

Ⅲ.2.1.2 Sub-section 2.2: Other targets

Introduction: This sub-section briefly explores how other policy targets may, in combination with the patent targets and indictors mentioned in the prior sub-section, negatively impact China's ability to stimulate patent quality and innovation.

Ⅲ.2.1.2.1 GDP targets

GDP targets imposed by provincial/municipal level governments may in some ways discourage risk-taking needed to boost breakthrough inventions and innovation in a way that other types of measures might. This is due to the same concerns mentioned in sub-section 2.1 surrounding quantitative patent targets. While provincial/municipal GDP growth indicators for 2012 have been reduced in every province/municipality except Hainan,[22] when compounded by the concerns mentioned with the patent targets imposed at the national-level and by sub-central level governments, they may collectively somewhat hamper initiatives that could better stimulate sustainable development of innovation and associated quality patents.

---

[18] Wild, J. (2011, January). Quality is China's biggest patent challenge. *Intellectual Assessment Management*. Retrieved from http://www.iam-magazine.com/blog/Detail.aspx?g=e81c5421-bccc-4eb5-9895-f347443cf73e

[19] 2011, October 28- Meeting with SIPO officials and European Chamber representatives at SIPO in Beijing

[20] It would also be useful to have an update on SIPO's efforts to ensure their reviewers are not only technically trained, but also trained as necessary in law.

[21] Also of concern is the technical writing capacity of applicants that work with the intermediary services. Note: In 2010, there were 779 patent agencies in China and 12,000 qualified patent agents, although only half of these agents worked for agencies (Source: Gao et al. (2011), p. 76)

[22] Thirty provinces lower GDP growth target. (2012, February 23). *China Daily*. Retrieved from http://www.chinadaily.com.cn/business/2012-02/23/content_14679318.htm; also see: China's inland provinces propose double-digit GDP targets. (2012, February 7). *Want China Times*. Retrieved from http://www.wantchinatimes.com/news-subclass-cnt.aspx?id=20120207000091&cid=1102

Ⅲ.2.2 Summary

China has emphasised a range of quantitative patent targets, which while impressive in some respects, may not encourage quality let alone highest-quality patents and innovation at large as efficiently and effectively as envisaged by policymakers; in fact, they may actually discourage highest-quality patents and at worst may sometimes actually encourage development and filing of low-quality patents. There are some weaknesses in the targets due to the absence of important criteria for ensuring patent quality. Moreover, the overly heavy focus on quantitative patent targets in China overshadows the type of benchmarking that better reflects the nuances underlying creativity and the actual economic relevance of inventions, which are building blocks of quality patents and an innovation economy. Given these risks, it is important to re-think China's heavy quantitative patent target-based approach, and also essential that related performance evaluation systems for SOEs and other enterprises, Party officials, universities and research institutes, and other entities be properly crafted.

Ⅲ.2.3 Recommendations

Ⅲ.2.3.1 Core recommendations

Ⅲ.2.3.1.1 Subsection 2.1

1. **Consider alternative strategies and metrics for measuring the strength of Chinese innovativeness, and base policy more so on these approaches than quantitative patent targets.**

   1.1 Consider making new policy targets less based on quantitative patent targets and more based on other metrics. These metrics might include sales and new product announcements, among other indictors like the RIS-style composite index mentioned below.

   The Chinese authorities could consider compiling a composite innovation indicator for different provinces/municipalities in China similar to the EC's Regional Innovation Scoreboard (RIS), which could be used to monitor performance and inform policymaking.[23] An exchange could be organised between the Directorate General of Enterprise and Industry of the EC in charge of overseeing compilation of the EIS, and relevant Chinese entities, include SIPO, the National Bureau of Statistics, and MoST, on establishing a similar type of metric.

2. **Recommendation: Relevant authorities should review SASAC's performance review of SOEs to ensure that any patent-based performance review process best stimulates quality patents. Issues/possible reforms herein include:**

   2.1 If it is insisted that patent targets be maintained, provide higher points in the performance review to successfully granted and not subsequently invalidated invention patents or perhaps even require these invention patents to meet a superlative threshold for inventiveness. For example, a SOE would be awarded X points after being granted a patent, and additional Y points after the statute of limitations expires for challenging the patent if no successful challenges have been brought. The aforementioned level of inventiveness and patent quality at large would be determined by technical specialists and patent experts within SIPO, who would coordinate with SASAC. (Note: Due to inevitable time lags, this performance

[23] RIS indicators include (data sources in parenthesis): (1) Population with tertiary education (ISCED 5-6) per population aged 25-26 (Eurostat); (2) Participation in life-long learning per population aged 25-64 (Eurostat); (3) Public R&D expenditures (R&D expenditures in the government sector (GOVERD) and the higher education sector (HERD) as a percentage of GDP (Eurostat); (4) Share of households with broadband access (Eurostat); (5) Business R&D expenditures (BERD) as a percentage of GDP (Eurostat); (6) Non-R&D innovation expenditures of SMEs as a percentage of turnover (Eurostat); (7) SMEs innovating in-house as a percentage of all SMEs (Eurostat CIS); (8) Innovative SMEs collaborating with others as a percentage of all SMEs (Eurostat CIS); (9) Number of patents applied for at the EPO per million population (Eurostat); (10) SMEs introducing product or process innovations as a percentage of all SMEs (Eurostat CIS); (11) Number of SMEs that are innovating who replied in surveys that their product or process innovation had a highly important effect on reducing labour costs per unit of output as a percentage of all SMEs (Eurostat CIS); (12) Number of SMEs that are innovating who replied that their product or process innovation had a highly important effect on reducing materials and energy per unit of output as a percentage of all SMEs (survey); (13) employment in medium-high & high-tech manufacturing (% workforce) (Eurostat); (14) Employment in knowledge-intensive services (% of workforce) (Eurostat); (15) new-to-market sales of all SMEs as a percentage of turnover (Eurostat CIS); and (16) new-to-firm sales of all SMEs as a percentage of turnover (Eurostat CIS). (Source: Hollanders, H., Tarantola, S., & Loschky, A. (2009). *Regional innovation scoreboard (RIS) 2009*. Inno Metrics.)

evaluation methodology may result in negative performance statistics being registered in a different year [e.g. 2014] or quarter than the negative performance [e.g. the invalidation of a patent] was actually executed [e.g. 2013], thus potentially less than optimally rewarding positive performance in the latter year. Likewise, it may reward positive performance in a different year or quarter than the positive performance [e.g. time the patent was granted would be after the time its underlying solution was developed]. Nonetheless, this approach arguably provides necessary incentives to make sure SOEs are careful in their filings, and creates incentives to file legitimate invention patents.)

2.2 Ensure that SOEs with patents that are successfully challenged as infringing do not count such patents as positive statistics in their performance review. Successfully challenged patents should count as a negative statistic in an SOE's performance review.

2.3 Ensure that when utility model patents are abandoned for a simultaneously filed and later granted invention patent, that only one patent filing is counted (the invention patent) in the performance review. To be sure, any indicator of the awarding of the prior utility model should not be counted in performance indicators or at least be noted as later being abandoned for an invention patent.

2.4 Consider using a performance indicator of the ratio of an SOE's invention patents in-force to their filings of utility and design patents.

3. **Recommendation**: **In addition to adopting a structure similar to that for SASAC's performance review for SOEs as mentioned in Recommendation 2, ensure an appropriate patent-based performance review process for all entities evaluated by the government.**

   3.1 MoST can give research institutes demerits that will have an effect on their funding if they poorly perform on patent-quality based indicators.

   3.2 Seek more details from SIPO about how exactly its performance evaluation system best stimulates quality patents and discourages low-quality patents.

   3.3 Review other entities performance review systems and ensure all patent-based criteria therein are effectively centered on quality metrics.

4. **Recommendation: Establish a forum involving government, academics, and competitive domestic companies for best-practice sharing on how to best craft patent strategies for SOEs and other government-funded entities.** This should include a discussion on what should be patented vs. protected as a trade secret, when a solution should be abandoned rather than continuing with the patent application process, among other related considerations.

5. **Recommendation: the central-level, led by the State Council, should set-up an incentive system and monitoring mechanism whereby departments that implement the best systems for encouraging patent quality are given certain recognitions/awards.** It should be noted that at the same time performance indicators would need to be changed for ministries whose performance is overly tied to absolute numbers of patents.

6. **Recommendation: Establish a formal program and forum aimed at discussing and deciding on better tools to screen and monitor patent quality**. Chinese ministries, in partnership with think-tanks and industry experts should adopt new methodologies to monitor patent quality and

adjust policies accordingly. For example, if upon scrutiny of the methodology of the IPDRC's patent strength ranking (which does not appear to be possible due to lack of publically available information on the methodology at the time of publication of this study), it is determined the ranking is solid, than incorporate it as part of this program.

Ⅲ.2.3.2 Other recommendations

Ⅲ.2.3.2.1 Sub-section 2.2

7. **Recommendation: Reassess economic indicators imposed by provincial/municipal governments that may not most efficiently and effectively spur innovation in the near-term, and replace them as necessary with new indicators.**

Ⅵ References

SECONDARY SOURCES

"China's inland provinces propose double-digit GDP targets." (2012, February 7). Want China Times. Retrieved from http://www.wantchinatimes.com/news-subclass-cnt.aspx?id=20120207000091&cid=1102

2011, October 28- Meeting with SIPO officials and European Chamber representatives at SIPO in Beijing

Bulgaria's national research strategy 2020. Monitoring indicators, retrieved from http://www.mon.bg/opencms/export/sites/mon/en/top_menu/science/national_research_strategy-2020.pdf

Gao, L., Li, M., Cheng, Y. et al. (2011, September). Report on the quality for invention in China. Beijing Intellectual Property Rights Institute.

Girma, S., & Gong, Y. (2008a). FDI, linkages and the efficiency of state-owned enterprises in China. Journal of Development Studies, Vol. 44, 728-49. Retrieved from http://www.tandfonline.com/doi/abs/10.1080/00220380802009233

Girma, S., & Gong, Y. (2008b). Putting people first? Chinese state-owned enterprises' adjustment to globalization. International Journal of Industrial Organization, Vol. 26, 573-85. Retrieved from http://www.sciencedirect.com/science/article/pii/S0167718707000513

Girma, S., Gong, Y., Gorg, H., & Yu, Z. (2009). Can production subsidies explain China's export performance? Evidence from first-level data. The Scandinavian Journal of Economics, Issue 4, 863-891. Retrieved from http://onlinelibrary.wiley.com/doi/10.1111/j.1467-9442.2009.01586.x/full

Hollanders, H., Tarantola, S., & Loschky, A. (2009). *Regional innovation scoreboard (RIS) 2009*. Inno Metrics.

International Monetary Fund [IMF]. (2011, April). World economic outlook report. Retrieved from http://www.imf.org/external/pubs/ft/weo/2011/01/pdf/text.pdf

"Thirty provinces lower GDP growth target." (2012, February 23). *China Daily*. Retrieved from http://www.chinadaily.com.cn/business/2012-02/23/content_14679318.htm

STATISTICAL SOURCES

National Bureau of Statistics of China. *China statistical yearbook.* Retrieved from http://www.stats.gov.cn/

China Statistical Yearbook Statistics

POLICIES AND OTHER MEASURES

Anhui Intellectual Property Office. (2011, November 17). *Anhui's 12th Five Year Plan on intellectual property (patent) development*. Retrieved from http://www.ahipo.gov.cn/dt2111111175.asp?DocID=2111116610

Beijing Intellectual Property Bureau, & Beijing Development and Reform Commission. (2011, August 24). *Notice on launching Beijing's 12th Five Year Plan on intellectual property (patent) development*. Retrieved from http://www.bjipo.gov.cn/zcfg/zlgh/201202/t20120207_25714.html

Beijing MoF, & Beijing Municipal Bureau of Quality and Technical Supervision. (2006, November 13). *Beijing administrative measures of the special subsidiary funds for the formulation (revision) of technology standards*. Retrieved from http://www.bjtsb.gov.cn/infoview.asp?ViewID=2711
Beijing People's Government. (2009, May 6). *Advices on implementation of Beijing intellectual property strategy compendium*. Retrieved from http://www.gov.cn/gzdt/2009-05/06/content_1305629.htm
Department of Science and Technology in Shanxi. (2009, August 13). *Launch drafting Shanxi intellectual property strategy compendium*. Retrieved from http://www.shanxigov.cn/n16/n1611/n3539/n7299/n20244/8365727.html
Development and Reform Commission of Guangxi Zhuangzu Autonomous Region, & Science and Technology Office of Guangxi Zhuangzu Autonomous Region. (2011, August 8). *Guangxi Zhuangzu autonomous region's 12th Five Year Plan on science and technology development*. Retrieved from http://gov.gxsti.net/zwgk/zxtz/613832.shtml
Fourth Plenary Session of the Fifteenth Central Committee of Communist Party of China. (1999, September 22). *Decision of the Central Committee of the Communist Party of China on major issues concerning the reform and development of state-owned enterprises*. Retrieved from http://cpc.people.com.cn/GB/64162/71380/71382/71386/4837883.html
Fujian Province People's Government. (2010, January 30). *Advices on implementation of national intellectual property strategy compendium*. Retrieved from http://baike.baidu.com/view/3357924.htm
Gansu Intellectual Property Office. (2011, March 22). *Gansu's 12th Five Year Plan on intellectual property (patent) development*. Retrieved from http://www.gsipo.gov.cn/zcfg/detail.php?n_no=38287&dir=/%D5%FE%B2%DF%B7%A8%B9%E6/%C6%E4%CB%FB
Gansu Prisons Bureau, & Gansu Intellectual Property Department. (2009, October 1). *Measures for the rewards and recognition of the invention, creation and technical innovation of prisoners within the period of execution (trial)*. Retrieved from http://www.sipo.gov.cn/mtjj/2009/200908/t20090803_471159.html
Gansu Province People's Government. (2010, June 18). *Notice on launching Gansu intellectual property strategy compendium*. Retrieved from http://www.gsipo.gov.cn/zscqzl/detail.php?n_no=36798
Government of Xinjiang Uygur Autonomous Region. (2010, April 19). *Notice on launching intellectual property strategy compendium of Xinjiang Uygur autonomous region.* Retrieved from http://www.akss.gov.cn/childsite/kjj/index.php?option=com_content&view=article&id=360:2010-05-10-09-03-45&catid=46:2009-04-21-01-31-28&Itemid=77
Guangdong Intellectual Property Office. (2012, March 27). *Intellectual property strategy compendium of Guangdong province (2007-2020)*. Retrieved from http://www.sipo.gov.cn/twzb/gdyjbkbys/bjzl/201203/t20120327_659900.html
Guangdong Province People's Government. (2011, August 10). *Guangdong's 12th Five Year Plan on intellectual property (patent) development*. Retrieved from http://zwgk.gd.gov.cn/006939748/201108/t20110823_269558.html
Guangdong Provincial People's Congress. (2010, February 29). *News conference on promulgation and implementation of provincial independent innovation regulations*. Retrieved from http://www.npc.gov.cn/npc/xinwen/dfrd/guangdong/2012-02/29/content_1693676.htm
Guangxi Zhuangzu Autonomous Region People's Government. (2009, December 23). *Notice of advices on launching Guangxi Zhuangzu autonomous region intellectual property strategy compendium*. Retrieved from http://www.gxipo.net/zcfg/zl/554850.shtml
Guizhou Intellectual Property Office. (2009, February 14). *Intellectual property strategy compendium of Guizhou province (2006-2015).* Retrieved from http://www.jsip.gov.cn/news/ztbd/ztbdcs/ztbdpd9/200902/20090214_51568.html
Guizhou Intellectual Property Office. (2011, October 13). *Guizhou's 12th Five Year Plan on*

intellectual property (patent) development. Retrieved from http://www.chinagzpp.cn/Article/ShowArticle.asp?ArticleID=1110
Hainan Intellectual Property Office. (2010, July 6). *Intellectual property strategy compendium of Hainan province*. Retrieved from http://www.hipo.gov.cn/list.asp?id=2883
Hainan Intellectual Property Office. (2011, December 27). *Hainan's 12th Five Year Plan on patent development.* Retrieved from http://www.hipo.gov.cn/list.asp?id=3165
Hebei Intellectual Property Office. (2011, June 10). *Hebei's 12th Five Year Plan on patent development*. Retrieved from http://218.12.44.17/content.jsp?code=40170382-3/2011-00104&name
Hebei Province People's Government. (2009, June 22). *Advices on implementation of National intellectual property strategy compendium*. Retrieved from http://2010.hebstd.gov.cn/?thread-64-1.html
Heilongjiang Province People's Government. (2011, May 22). *Notice on launching Heilongjiang intellectual property strategy compendium* (2011-2020). Retrieved from http://baike.baidu.com/view/7153606.htm
Henan Intellectual Property Office. (2008, November 23). *Intellectual property strategy compendium of Henan province*. Retrieved from http://www.hnpatent.gov.cn/patentwebsite/show.do?method=show&id=3577
Henan Intellectual Property Office. (2010, December 20). *Henan's 12th Five Year Plan on intellectual property development*. Retrieved from http://hnszscqzlw.cn/ArticleShow.asp?id=89
Hubei Intellectual Property Bureau. (2011, July 29). *Hubei's 12th Five Year Plan on intellectual property (patent) development*. Retrieved from http://www.hbipo.gov.cn/upfile/20100729011527652.doc
Hubei Province People's Government. (2010, August 11). *Intellectual Property strategy compendium of Hubei province*. Retrieved from http://www.xinhuanet.com/chinanews/2010-08/25/content_20711850.htm
Hunan Intellectual Property Office, & Development and Reform Commission of Hunan Province. (2012, May 7). *Hunan's 12th Five Year Plan on patent development*. Retrieved from http://www.sipo.gov.cn/dtxx/zlgzdt/2012/201205/t20120507_687187.html
Hunan Province People's Government. (2010, March 27). *Intellectual Property strategy compendium of Hunan province*. Retrieved from http://news.163.com/09/0327/11/55DK0BOK000120GU.html
Intellectual Property Office of Jiangsu Province. (2011, November 2). *Jiangsu's 12th Five Year Plan on patent development*. Retrieved from http://www.jsip.gov.cn/laws/bmgfxwj/201112/20111216_70465.html
Intellectual Property Office of Jiangxi Province. (2011, April 6). *Call for comments on Jiangxi province intellectual property strategy compendium.* Retrieved from http://zl.ncinfo.gov.cn/readnews.asp?id=2292
Intellectual Property Office of Liaoning. (2011, November 15). *Liaoning's 12th Five Year Plan on patent development*. Retrieved from http://www.lnipo.gov.cn/zscqjweb/zsweb/informationShow.jsp?sectorId=yewgh&infoId=bb45458632fb1d2c0133a58bdb5901b8
Intellectual Property Office of Yunnan Province. (2011, March 24). *Yunnan's 12th Five Year Plan on intellectual property (patent) development*. Retrieved from http://www.ynipo.gov.cn/newsview.aspx?id=3074
Intellectual Property's Office of Liaoning. (2011, June 8). *Intellectual Property strategy compendium of Liaoning province*. Retrieved from http://www.lnipo.gov.cn/zscqjweb/zsweb/informationShow.jsp?sectorId=zscqzlgy&infoId=bb4545863068d15001306d2df5070046
Jiangsu Province People's Government. (2009, January 5). *Notice on launching intellectual property strategy compendium of Jiangsu province*. Retrieved by from

http://www.jsip.gov.cn/news/ywdtnews/200901/20090112_50874.html
Jinan Municipal Intellectual Property Office. (2012, March 6). *2012 Jinan standards on financial support for patents*. Retrieved from http://pss-system.gov.cn/sipopublicsearch/portal/showContentDetailAC!showContentDetail.do?wee.bizlog.modulelevel=0100103&contentId=97cf5d82782840769b33880b34a6ec94&catalogIdForNV=law
MOFCOM. (2009, February 1). *Measures of the administration of technology import and export contracts registration, [decree No. 3, 2009].* Retrieved from http://www.gov.cn/flfg/2009-02/04/content_1221640.htm
MOST, NDRC, & MoF. (2007). *Hebei Province indigenous innovation product accreditation management rules (provisional)*. Retrieved from http://www.tsdrc.gov.cn/a/xinxigongkai/gaoxinjishu/2010/0308/1798.html
National Intellectual-Property Strategy [NIPSO]. (2012, April 12). *2012 major tasks on implementation of Fujian's IP strategy*. Retrieved from http://www.nipso.cn/onews.asp?id=13601
National Intellectual-Property Strategy [NIPSO]. (2012, April 12). *2012 major tasks on implementation of Gansu's IP strategy*. Retrieved from http://www.nipso.cn/onews.asp?id=13587
National Intellectual-Property Strategy [NIPSO]. (2012, April 12). *2012 major tasks on implementation of Guangdong's IP strategy*. Retrieved from http://www.nipso.cn/onews.asp?id=13595
National Intellectual-Property Strategy [NIPSO]. (2012, May 4). *2012 major tasks on implementation of Beijing's IP strategy*. Retrieved from http://www.nipso.cn/onews.asp?id=14242
National Intellectual-Property Strategy. (2012, April 12). *2012 major tasks on implementation of Hebei's IP strategy*. Retrieved from http://www.nipso.cn/onews.asp?id=13609
National Intellectual-Property Strategy. (2012, April 12). *2012 major tasks on implementation of Henan's IP strategy*. Retrieved from http://www.nipso.cn/onews.asp?id=13599
National Intellectual-Property Strategy. (2012, April 12). *2012 major tasks on implementation of Hubei's IP strategy*. Retrieved from http://www.nipso.cn/onews.asp?id=13598
National Intellectual-Property Strategy. (2012, April 12). *2012 major tasks on implementation of Hunan's IP strategy*. Retrieved from http://www.nipso.cn/onews.asp?id=13596
National Intellectual-Property Strategy. (2012, April 12). *2012 major tasks on implementation of Liaoning's IP strategy.* Retrieved from http://www.nipso.cn/onews.asp?id=13606
National Intellectual-Property Strategy. (2012, April 12). *2012 major tasks on implementation of Ningxia Huizu autonomous region's IP strategy*. Retrieved from http://www.nipso.cn/onews.asp?id=13585
National Intellectual-Property Strategy. (2012, April 12). *2012 major tasks on implementation of Qinghai's IP strategy*. Retrieved from http://www.nipso.cn/onews.asp?id=13586
National Intellectual-Property Strategy. (2012, April 12). *2012 major tasks on implementation of Shandong's IP strategy*. Retrieved from http://www.nipso.cn/onews.asp?id=13600
National Intellectual-Property Strategy. (2012, April 12). *2012 major tasks on implementation of Xinjiang Uygur autonomous region's IP strategy*. Retrieved from http://www.nipso.cn/onews.asp?id=13584
National Intellectual-Property Strategy. (2012, June 4). *2012 major tasks on implementation of Heilongjiang's IP strategy*. Retrieved from http://www.nipso.cn/onews.asp?id=14235
National Intellectual-Property Strategy. (2012, June 4). *2012 major tasks on implementation of Inner Mongolia autonomous region's IP strategy*. Retrieved from http://www.nipso.cn/onews.asp?id=14238
National Intellectual-Property Strategy. (2012, June 4). *2012 major tasks on implementation of Jiangsu's IP strategy*. Retrieved from http://www.nipso.cn/onews.asp?id=14233
National Intellectual-Property Strategy. (2012, June 4). *2012 major tasks on implementation of Jilin's*

IP strategy. Retrieved from http://www.nipso.cn/onews.asp?id=14236
National Intellectual-Property Strategy. (2012, June 4). *2012 major tasks on implementation of Shanghai's IP strategy*. Retrieved from http://www.nipso.cn/onews.asp?id=14234
National Intellectual-Property Strategy. (2012, June 4). *2012 major tasks on implementation of Shanxi's IP strategy*. Retrieved from http://www.nipso.cn/onews.asp?id=14239
National Intellectual-Property Strategy. (2012, June 4). *2012 major tasks on implementation of Tianjin's IP strategy*. Retrieved from http://www.nipso.cn/onews.asp?id=14241
National Torch Program. (2010, December 8). *Notice regarding lists of companies recognised as key high-and-new technology enterprises (HNTEs)*. Retrieved from http://www.innocom.gov.cn/web/static/articles/catalog_2/2010-12-09/article_282041042cb0ab79012ccaa9706c000f/282041042cb0ab79012ccaa9706c000f.html
Ningxia Huizu Autonomous Region People's Government. (2007, September 27). *Notice on launching intellectual property strategy compendium of Ningxia Huizu autonomous region*. Retrieved from http://govinfo.nlc.gov.cn/nxfz/zfgb/201120/201111/t20111124_1144182.html?classid=423
People's Government of Hunan Province. (2012, February 29). *Hunan's outline on constructing an innovative province*. Retrieved from http://www.hunan.gov.cn/zwgk/hndt/zwdt/201203/t20120308_457488.htm
Qinghai Province People's Government. (2008, November 19). *Notice of advices on implementation of national intellectual property strategy compendium*. Retrieved from http://www.qhys.gov.cn/html/42/21102.html
Qinghai Province Department of Science and Technology. (2010, May 27). *Qinghai province indigenous innovation product accreditation management rules*. Retrieved from http://www.qhppc.com/html/zhengcefagui/20100527/409.html
Shaanxi Intellectual Property Office. (2011, May 20). *Shaanxi's 12th Five Year Plan on intellectual property (patent) development*. Retrieved from http://www.snipo.gov.cn/ReadNews.asp?NewsID=11091&BigClassName=%D6%AA%CA%B6%B2%FA%C8%A8%B9%A4%D7%F7%A1%B0%CA%AE%B6%FE%CE%E5%A1%B1%B9%E6%BB%AE&SmallClassName=%B9%A4%D7%F7%B6%AF%CC%AC
Shaanxi Province People's Government. (2008, November 14). *Notice on launching Shaanxi intellectual property strategy compendium (2008-2020) and Shaanxi intellectual property strategy implementation plan (2008-2010)*. Retrieved from http://www.shaanxi.gov.cn/0/103/6295.htm
Shandong Intellectual Property Office. (2011, July 15). *Shandong's 12th Five Year Plan on patent development*. Retrieved from http://www.sipo.gov.cn/dfzz/shandong/zcfg/sjwj/201107/t20110715_611387.htm
Shanghai Intellectual Property Administration on State Intellectual Property Office of P.R.C. (2011, November 19). *Shanghai's 12th Five Year Plan on intellectual property development*. Retrieved from http://www.sipa.gov.cn/gb/zscq/node2/node23/userobject1ai9309.html
Shanghai Intellectual Property Bureau. (2011, April 8). *Launch drafting Shanghai intellectual property strategy compendium (2011-2020)*. Retrieved from http://www.sipo.gov.cn/dtxx/gn/2011/201104/t20110408_595729.html
Shanxi Intellectual Property Office. (2011, December 26). *A general notice by Shanxi Intellectual Property Office: Shanxi's 12th Five Year Plan on Intellectual Property (patent) development*. Retrieved from http://218.26.227.183:8000/zscqj/sjdt/1451.htm
Sichuan Intellectual Property Office. (2012, February 5). *Major tasks regarding Sichuan's patent development for 2012*. Retrieved from http://www.sc.gov.cn/zt_sczt/2012zscq/2012zscq/201202/t20120206_1170227.shtml
Sichuan Intellectual Property Office. (2012, February 6). *Notice on launching 2012 implementation plan of Sichuan intellectual property strategy*. Retrieved from http://www.sc.gov.cn/zt_sczt/2012zscq/2012zscq/201202/t20120206_1170226.shtml

SIPO. (2008, March 19). *Instructions on patent fee payment*. Retrieved from http://www.sipo.gov.cn/zlsqzn/sqq/zlfy/200804/t20080422_390241.html
SIPO. (2010, November 11). *National patent development strategy (2011-2020)*. Retrieved from http://www.sipo.gov.cn/ztzl/ndcs/zgzlz/5thpatentweek/pw005strategy/201111/t20111101_627123.html
SIPO. (2012, April 10). *Promotion plan for the implementation of the national intellectual property strategy in 2012*. Retrieved from http://www.sipo.gov.cn/twzb/2012zscqjlsstjjh/bjzl/201204/t20120410_667306.html
Standing Committee of the National People's Congress. (2007, August 30). *Anti-monopoly law*. Retrieved from http://www.lawinfochina.com/display.aspx?lib=law&id=6351
State Council Information Office of the People's Republic of China [SCIO]. (2011, March 17). *The 12th Five-Year Plan for national economic and social development of the People's Republic of China*. Retrieved from http://www.scio.gov.cn/zxbd/gdxw/201103/t876235.htm
State Council. (2006, February 9). *Guidelines on the national medium- and long-term program for science and technology development (2006-2020)*. Retrieved from http://www.gov.cn/jrzg/2006-02/09/content_183787.htm
State Council. (2008, June 5). *Outline of the national intellectual property strategy*. Retrieved from http://www.gov.cn/gongbao/content/2008/content_1018942.htm
State Council. (2011, April 28). *Notice of the General Office of the State Council on advancing several opinions of ten departments including SIPO on strengthening the work of IPR in strategic emerging industries [SC Notice on IPR in strategic emerging industries]*. Retrieved from http://www.gov.cn/zwgk/2012-05/02/content_2127881.htm
State Intellectual Office of P.R.C. [SIPO]. (2012, February 23). *Plan put forward on the implementation of 2012 Heilongjiang's IP strategy*. Retrieved from http://www.sipo.gov.cn/twzb/2012hljzscq/2012hljzscqbjzl/201202/t20120223_646396.html
State Intellectual Property Office of P.R.C. (2011, May 26). *Key points on the implementation of Shandong intellectual property strategy*. Retrieved from http://www.sipo.gov.cn/dtxx/zlgzdt/2011/201105/t20110526_605561.html
State Intellectual Property Office of P.R.C. (2012, June 4). *Key points on the implementation of Inner Mongolia autonomous region 2012 intellectual property strategy*. Retrieved from http://www.nipso.cn/onews.asp?id=14238
State Intellectual Property Office of P.R.C. (2012, March 28). *2012 Major tasks regarding Anhui's patent development for 2012*. Retrieved from http://www.sipo.gov.cn/dtxx/gn/2012/201203/t20120327_659916.html
Third Meeting of 8th National People's Congress Standing Committee, Zhuxi Ling (1993) No.10, *Unfair competition law of P.R China*. Retrieved from http://www.saic.gov.cn/fldyfbzdjz/zcfg/fv/200909/t20090928_71369.html
Tianjin Intellectual Property Office. (2011, December 23). *Notice on launching Tianjin's 12th Five Year Plan on patent*. Retrieved from http://zc.k8008.com/html/tianjin/shizhichanju/2011/1223/131829.html
Tianjin Intellectual Property Office. (2011, December 23). *Tianjin's 12th Five Year Plan on intellectual property development*. Retrieved from http://www.sipo.gov.cn/dfzz/tianjin/tzgg/201112/P020111222635593820156.pdf
Tianjin People's Government. (2010, March 15). *Notice on launching intellectual property strategy compendium of Tianjin*. Retrieved from http://www.tj.gov.cn/zwgk/wjgz/szfwj/201003/t20100324_115195.htm
Tibet Autonomous Region People's Government. (2012, May 25). *Science and technology development plan of Tibet autonomous region 12th Five Year Plan--Further enacting intellectual property strategy (2012) No.53*. Retrieved from http://www.tibetsti.gov.cn/Item.aspx?id=2562
Xinjiang Uygur Autonomous Region. (2011, August 7). *The implementation plan on intellectual*

property strategy compendium of Xinjiang Uygur autonomous region (2011-2015). Retrieved from http://www.xinjiang.gov.cn/xxgk/gwgb/zfwj/2011/81616.htm
Yunnan Intellectual Property Office. (2012, February 15). *Report of summary for 2011 IP work and major tasks for 2012 IP work by Yunnan intellectual property office*. Retrieved from http://www.ynipo.gov.cn/newsview.aspx?id=3075
Yunnan Province People's Government. (2009, August 7). *Notice of Advices on implementation of national intellectual property strategy compendium by Yunnan Province people's government（2008）No.18.* Retrieved from http://www.sipo.gov.cn/dfzz/yunnan/zcfg/zc/200908/t20090807_471689.htm
Zhejiang Province People's Government. (2009, December 22). *Notice of advices on implementation of national intellectual property strategy compendium by Zhejiang Province People's Government（2009）No.189*. Retrieved from http://www.zjpat.gov.cn/details.aspx?newsId=c644de29-7495-4cda-b341-2bc9b51beeb6
Zhejiang Provincial Department of Technology. (2012, February 1). *Zhejiang's 12th Five Year Plan on patent development.* Retrieved from http://www.zjkjt.gov.cn/news/node01/detail0101/2012/0101_28641.htm

Table 14: Comparison chart: Citations for major recent provincial/municipal IP plans and strategies reviewed

Province/Municipality	12th Five Year IP Plan/equivalent plan** (citation) Time period: 2011-2015	IP Strategy/equivalent strategy** (citation)
Anhui	*Anhui's 12th Five Year Plan on Intellectual Property (Patent) Development* issued on November 17th 2011 by the Anhui Intellectual Property Office **Link:** http://www.ahipo.gov.cn/dt2111111175.asp?DocID=2111116610	No multi-year plan, *Major Tasks Regarding Anhui's Patent Development for 2012* issued on March 28th 2012 **Link:** http://www.sipo.gov.cn/dtxx/gn/2012/201203/t20120327_659916.html
Beijing	*Notice on Launching Beijing's 12th Five Year Plan on Intellectual Property (Patent) Development* issued on August 24th 2011 by Beijing Intellectual Property Bureau and Beijing Development and Reform Commission **Link:** http://www.bjipo.gov.cn/zcfg/zlgh/201202/t20120207_25714.html.	*Advice on Implementation of the Beijing Intellectual Property Strategy Compendium by the Beijing People's Government* issued on May 6th 2009 by the Beijing People's Government **Link:** http://www.gov.cn/gzdt/2009-05/06/content_1305629.htm ***2012 Major Tasks on Implementation of Beijing's IP Strategy* issued on May 4th 2012 under the National Intellectual Property Strategy Link: http://www.nipso.cn/onews.asp?id=14242

Chongqing	*Chongqing's 12th Five Year Plan on Intellectual Property (Patent) Development* issued on October 27th 2011 by the general office of Chongqing Municipal People's Government **Link:** http://www.cqipo.gov.cn/templet/default/ShowArticle.jsp?id=5421	None
Fujian	None	*Advice on Implementation of the National Intellectual Property Strategy Compendium by the Fujian Province People's Government* issued on January 30th 2010 by the Fujian Province People's Government **Link:** http://baike.baidu.com/view/3357924.htm ***2012 Major Tasks on Implementation of Fujian's IP Strategy* issued on April 12th 2012 under the National Intellectual Property Strategy **Link:** http://www.nipso.cn/onews.asp?id=13601
Gansu	*Gansu's 12th Five Year Plan on Intellectual Property (Patent) Development* issued on March 22nd 2011 by the Gansu Intellectual Property Office **Link:** http://www.gsipo.gov.cn/zcfg/detail.php?n_no=38287&dir=/%D5%FE%B2%DF%B7%A8%B9%E6/%C6%E4%CB%FB	*Notice on Launching Gansu Intellectual Property Strategy Compendium by the Gansu Province People's Government (2010) No.49* issued on June 18th 2010 by the Gansu Province People's Government **Link:** http://www.gsipo.gov.cn/zscqzl/detail.php?n_no=36798 ***2012 Major Tasks on Implementation of Gansu's IP Strategy* issued on April 12th 2012 under the National Intellectual Property Strategy **Link:** http://www.nipso.cn/onews.asp?id=13587
Guangdong	*Guangdong's 12th Five Year Plan on Intellectual Property (Patent) Development* issued on August 10th 2011 by the General Office of Guangdong Province's People's Government Link:	*Intellectual Property strategy compendium of Guangdong Province (2007-2020)* issued on March 27th 2012 by the Guangdong Intellectual Property Office Link: http://www.sipo.gov.cn/twzb/gdyjbkbys/bjzl/201203/t20120327_659900.html

	http://zwgk.gd.gov.cn/006939748/201108/t20110823_269558.html	***2012 Major Tasks on Implementation of Guangdong's IP Strategy* issued on April 12th 2012 under the National Intellectual-Property Strategy **Link:** http://www.nipso.cn/onews.asp?id=13595
Guangxi	*Guangxi Autonomous Region's 12th Five Year Plan on Science and technology Development* issued on August 8th 2011 by the Development and Reform Commission of Guangxi Autonomous region and the Science and Technology Office of the Guangxi Autonomous Region **Link:** http://gov.gxsti.net/zwgk/zxtz/613832.shtml	*Notice on Advice for Launching the Guangxi Autonomous Region Intellectual Property Strategy Compendium by the Guangxi Autonomous Region People's Government*（*2009*）*No.109* issued on December 23th 2009 by the Guangxi Autonomous Region's People's Government **Link:** http://www.gxipo.net/zcfg/zl/554850.shtml
Guizhou	*Guizhou's 12th Five Year Plan on Intellectual Property (Patent) Development* issued on October 13th 2011 by the Guizhou Intellectual Property Office Link: http://www.chinagzpp.cn/Article/ShowArticle.asp?ArticleID=1110	*Intellectual Property Strategy Compendium of Guizhou Province (2006-2015)* issued on February 14th 2009 by the Guizhou Intellectual Property Office **Link:** http://www.jsip.gov.cn/news/ztbd/ztbdcs/ztbdpd9/200902/20090214_51568.html
Hainan	*Hainan's 12th Five Year Plan on Patent Development* issued on December 27th 2011 by the Hainan Intellectual Property Office **Link** http://www.hipo.gov.cn/list.asp?id=3165	*Intellectual Property Strategy Compendium of Hainan Province* issued on July 6th 2010 by the Hainan Intellectual Property Office **Link:** http://www.hipo.gov.cn/list.asp?id=2883
Hebei	*Hebei's 12th Five Year Plan on Patent Development* issued on June 10th 2011 by the Hebei Intellectual Property Office **Link:** http://218.12.44.17/content.jsp?code=40170382-3/2011-00104&name	*Advice on Implementation of the National Intellectual Property Strategy Compendium by the Hebei Province People's Government* issued on June 22th 2009 by the Hebei Province People's Government **Link:** http://2010.hebstd.gov.cn/?thread-64-1.html

		***2012 Major Tasks on Implementation of Hebei's IP Strategy* issued on April 12th 2012 under the National Intellectual Property Strategy **Link:** http://www.nipso.cn/onews.asp?id=13609
Heilongjiang	None	*Notice on Launching the Heilongjiang Intellectual Property Strategy Compendium by Heilongjiang Province People's Government (2011-2020)* issued on May 22nd 2011 by the Heilongjiang Province People's Government Link: http://baike.baidu.com/view/7153606.htm ***Plan to Put Forward Implementation of Heilongjiang's 2012 IP Strategy* issued on February 23rd 2012 **Link:** http://www.sipo.gov.cn/twzb/2012hljzscq/2012hljzscqbjzl/201202/t20120223_646396.html ***2012 Major Tasks on Implementation of Heilongjiang's IP Strategy* issued on June 4th 2012 under the National Intellectual Property Strategy **Link:** http://www.nipso.cn/onews.asp?id=14235
Henan	*Henan's 12th Five Year Plan on intellectual Property Development* issued on December 20th 2010 by the Henan Intellectual Property Office **Link:** http://hnszscqzlw.cn/ArticleShow.asp?id=89	*Intellectual Property Strategy Compendium of Henan Province (2008) No.59* issued on November 23rd 2008 by the Henan Intellectual Property Office **Link:** http://www.hnpatent.gov.cn/patentwebsite/show.do?method=show&id=3577 ***2012 Major Tasks on Implementation of Henan's IP Strategy* issued on April 12th 2012 under the National Intellectual Property Strategy **Link:** http://www.nipso.cn/onews.asp?id=13599

Hubei	*Hubei's 12th Five Year Plan on Intellectual Property (Patent) Development* issued on July 29th 2011 by the Hubei Intellectual Property Bureau **Link:** http://www.hbipo.gov.cn/upfile/20100729011527652.doc	*Intellectual Property Strategy Compendium of Hubei Province by Hubei Province People's Government* issued on August 11th 2010 by the Hubei Province People's Government **Link:** http://www.xinhuanet.com/chinanews/2010-08/25/content_20711850.htm http://www.hbipo.gov.cn/upfile/20110307162744906.doc ***2012 Major Tasks on Implementation of Hubei's IP Strategy* issued on April 12th 2012 under the National Intellectual Property Strategy Link: http://www.nipso.cn/onews.asp?id=13598
Hunan	*Hunan's 12th Five Year Plan on Patent Development* issued on May 7th 2012 by the Hunan Intellectual Property Office and Development and Reform Commission of Hunan Province **Link:** http://www.sipo.gov.cn/dtxx/zlgzdt/2012/201205/t20120507_687187.html	*Intellectual Property Strategy Compendium of Hunan Province by the Hunan Province People's Government* issued on March 27th 2010 by the Hunan Province People's Government **Link:** http://news.163.com/09/0327/11/55DK0BOK000120GU.html ***2012 Major Tasks on Implementation of Hunan's IP Strategy* issued on April 12th 2012 under the National Intellectual Property Strategy. **Link:** http://www.nipso.cn/onews.asp?id=13596
Inner Mongolia	None	*Key points in the Implementation of the Inner Mongolia Autonomous Region 2012 Intellectual Property Strategy* issued on June 4th 2012 **Link:** http://www.nipso.cn/onews.asp?id=14238 ***2012 Major Tasks on Implementation of Inner Mongolia Autonomous Region's IP Strategy* issued on June 4th 2012 under the National Intellectual Property Strategy Link:

		http://www.nipso.cn/onews.asp?id=14238
Jiangsu	*Jiangsu's 12th Five Year Plan on Patent Development* issued on November 2nd 2011 by the Intellectual Property Office of Jiangsu Province **Link:** http://www.jsip.gov.cn/laws/bmgfxwj/201112/20111216_70465.html	*Notice on Launching the Intellectual Property Strategy Compendium of Jiangsu Province by Jiangsu Province People's Government* issued on January 5th 2009 by the Jiangsu Province People's Government **Link:** http://www.jsip.gov.cn/news/ywdtnews/20090901/20090112_50874.html ***2012 Major Tasks on Implementation of Jiangsu's IP Strategy* issued on June 4th 2012 under the National Intellectual Property Strategy. Link: http://www.nipso.cn/onews.asp?id=14233
Jiangxi	None	Call for comments on the Jiangxi Province Intellectual Property Strategy Compendium by the Intellectual Property Office of Jiangxi Province on April 6th 2011 **Link:** http://zl.ncinfo.gov.cn/readnews.asp?id=2292
Jilin	None	***2012 Major Tasks on Implementation of Jilin's IP Strategy* issued on June 4th 2012 under the National Intellectual Property Strategy. Link: http://www.nipso.cn/onews.asp?id=14236
Liaoning	*Liaoning's 12th Five Year Plan on Patent Development* issued on November 15th 2011 by the Intellectual Property Office of Liaoning **Link:** http://www.lnipo.gov.cn/zscqjweb/zsweb/informationShow.jsp?sectorId=yewgh&infoId=bb45458632fb1d2c0133a58bdb5901b8	*Intellectual Property Strategy Compendium of Liaoning Province by the Liaoning Province People's Government* issued on June 8th 2011 by the Intellectual Property Office of Liaoning **Link:** http://www.lnipo.gov.cn/zscqjweb/zsweb/informationShow.jsp?sectorId=zscqzlgy&infoId=bb4545863068d15001306d2df5070046 ***2012 Major Tasks on Implementation of Liaoning's IP Strategy* issued on April 12th 2012 under the National Intellectual Property Strategy Link: http://www.nipso.cn/onews.asp?id=13606

Ningxia	None	*Notice on Launching the Intellectual Property Strategy Compendium of Ningxia Huizu Autonomous Region by Ningxia Huizu Autonomous Region People's Government* issued on September 27th 2011 by the Ningxia Huizu Autonomous Region People's Government **Link:** http://govinfo.nlc.gov.cn/nxfz/zfgb/201120/201111/t20111124_1144182.html?classid=423 ***2012 Major Tasks on Implementation of Ningxia Huizu Autonomous Region's IP Strategy* issued on April 12th 2012 under the National Intellectual Property Strategy **Link:** http://www.nipso.cn/onews.asp?id=13585
Qinghai	None	*Notice of Advice on Implementation of the National Intellectual Property Strategy Compendium by the Qinghai Province People's Government* issued on November 19th 2008 by the Qinghai Province People's Government **Link:** http://www.qhys.gov.cn/html/42/21102.html ***2012 Major Tasks on Implementation of Qinghai's IP Strategy* issued on April 12th 2012 under the National Intellectual-Property Strategy **Link:** http://www.nipso.cn/onews.asp?id=13586
Shaanxi	*Shaanxi's 12th Five Year Plan on Intellectual Property (Patent) Development* issued on May 20th 2011 by the Shaanxi Intellectual Property Office **Link:** http://www.snipo.gov.cn/ReadNews.asp?NewsID=11091&BigClassName=%D6%AA%CA%B6%B2%FA%C8%A8%B9%A4%D7%F7%A1%B0%CA%AE%B6%FE%CE%E5%A1%B1%B9%E6%BB%AE&SmallClassName=%B9%	*Notice on Launching the Shaanxi Intellectual Property Strategy Compendium (2008-2020) and Shaanxi Intellectual Property Strategy Implementation Plan (2008-2010) by the Shaanxi Province People's Government* issued on November 14th 2008 by the Shaanxi Province People's Government **Link:** http://www.shaanxi.gov.cn/0/103/6295.htm

	A4%D7%F7%B6%AF%CC%AC	
Shandong	*Shandong's 12th Five Year Plan on Patent Development* issued on July 15th 2011 by the Shandong Intellectual Property Office **Link:** http://www.sipo.gov.cn/dfzz/shandong/zcfg/sjwj/201107/t20110715_611387.htm	*Key points on the Implementation of the Shandong Intellectual Property Strategy* issued on May 26th 2011 **Link:** http://www.sipo.gov.cn/dtxx/zlgzdt/2011/201105/t20110526_605561.html ***2012 Major Tasks on Implementation of Shandong's IP Strategy* issued on April 12th 2012 under the National Intellectual Property Strategy Link: http://www.nipso.cn/onews.asp?id=13600
Shanghai	*Shanghai's 12th Five Year Plan on Intellectual Property Development* issued on November 19th 2011 by the Shanghai Intellectual Property Administration (officially published on Shanghai Intellectual Property Administration's website on April 16th 2012) **Link:** http://www.sipa.gov.cn/gb/zscq/node2/node23/userobject1ai9309.html **Link** http://www.sipo.gov.cn/dtxx/gn/2011/201111/t20111109_629911.html	*Notice on Drafting the Shanghai Intellectual Property Strategy Compendium (2011-2020)* issued on April 8th 2011 by Shanghai Intellectual Property Administration **Link:** http://www.sipo.gov.cn/dtxx/gn/2011/201104/t20110408_595729.html ***2012 Major Tasks on Implementation of Shanghai's IP Strategy* issued on June 4th 2012 under the National Intellectual Property Strategy **Link:** http://www.nipso.cn/onews.asp?id=14234
Shanxi	**A general notice by Shanxi Intellectual Property Office: *Shanxi's 12th Five Year Plan on Intellectual Property (Patent) Development* issued on December 26th 2011 by the Shanxi Intellectual Property Office **Link:** http://218.26.227.183:8000/zscqj/sjdt/1451.htm	*Notice on Drafting the Shanxi Intellectual Property strategy Compendium* issued on August 13th 2009 by the Department of Science and Technology in Shanxi **Link:** http://www.shanxigov.cn/n16/n1611/n3539/n7299/n20244/8365727.html ***2012 Major Tasks on Implementation of Shanxi's IP Strategy* issued on June 4th 2012 under the National Intellectual Property Strategy **Link:** http://www.nipso.cn/onews.asp?id=14239

Sichuan	None	*Notice on Launching the 2012 Implementation Plan of Sichuan Intellectual Property Strategy by the Sichuan Province People's Government (2012) No.14* issued on February 6th 2012 by Sichuan Intellectual Property Office Link: http://www.sc.gov.cn/zt_sczt/2012zscq/2012zscq/201202/t20120206_1170226.shtml ***Major Tasks Regarding Sichuan's Patent Development for 2012* issued on February 5th 2012 by the Sichuan Intellectual Property Office **Link:** http://www.sc.gov.cn/zt_sczt/2012zscq/2012zscq/201202/t20120206_1170227.shtml
Tianjin	*Tianjin's 12th Five Year Plan on Intellectual Property Development* issued on December 23rd2011 by the Tianjin Intellectual Property Office **Link:** http://www.sipo.gov.cn/dfzz/tianjin/tzgg/201112/P020111222635593820156.pdf *Notice on Launching Tianjin's 12th Five Year Plan on Patents* issued on December 23rd 2011 by the Tianjin Intellectual Property Office Link: http://zc.k8008.com/html/tianjin/shizhichanju/2011/1223/131829.html	*Notice on Launching the Intellectual Property Strategy Compendium of Tianjin* issued on March 15th 2010 by the Tianjin People's Government **Link:** http://www.tj.gov.cn/zwgk/wjgz/szfwj/201003/t20100324_115195.htm ***2012 Major Tasks on Implementation of Tianjin's IP Strategy* issued on June 4th 2012 under the National Intellectual Property Strategy **Link:** http://www.nipso.cn/onews.asp?id=14241
Tibet	None	*Science and Technology Development Plan of the Tibet Autonomous Region 12th Five Year Plan for Further Enacting the Intellectual Property Strategy (2012) No.53* issued on May 25th 2012 by the Tibet Autonomous Region People's Government **Link:** http://www.tibetsti.gov.cn/Item.aspx?id=2562 *Great Progress Made Towards Protecting*

		Intellectual Property Rights in the Xizang Autonomous Region issued on May 29th 2011 **Link:** http://www.sipo.gov.cn/mtjj/2011/201105/t20110526_605517.html
Xinjiang	None	*Notice on Launching the Intellectual Property Strategy Compendium of the Xinjiang Uygur Autonomous Region* issued on April 19th 2010 by the government of Xinjiang Uygur Autonomous Region **Link:** http://www.akss.gov.cn/childsite/kjj/index.php?option=com_content&view=article&id=360:2010-05-10-09-03-45&catid=46:2009-04-21-01-31-28&Itemid=77 *The Implementation Plan on the Intellectual Property Strategy Compendium of the Xinjiang Uygur Autonomous Region (2011-2015)* issued on August 7th 2011 by the Xinjiang Uygur Autonomous Region **Link:** http://www.xinjiang.gov.cn/xxgk/gwgb/zfwj/2011/81616.htm ***2012 Major Tasks on Implementation of the Xinjiang Uygur Autonomous Region's IP Strategy* issued on April 12th 2012 under the National Intellectual Property Strategy **Link:** http://www.nipso.cn/onews.asp?id=13584
Yunnan	*Yunnan's 12th Five Year Plan on Intellectual Property (Patent) Development* issued on March 24th 2011 by the Intellectual Property Office of Yunnan Province **Link:** http://www.ynipo.gov.cn/newsview.aspx?id=3074	*Notice on Advice for Implementation of the National Intellectual Property Strategy Compendium by Yunnan Province People's Government〔2008〕No.18* issued on August 7th 2009 by the Yunnan Province People's Government **Link:** http://www.sipo.gov.cn/dfzz/yunnan/zcfg/zc/200908/t20090807_471689.htm ***Summary Report for the 2011 IP Work and Major Tasks for 2012 IP Work by the Yunnan Intellectual Property Office* issued on February 15th 2012 by Yunnan Intellectual Property Office

		Link: http://www.ynipo.gov.cn/newsview.aspx?id=3075
Zhejiang	*Zhejiang's 12th Five Year Plan on Patent Development* issued on February 1st 2012 by the Zhejiang Provincial Department of Technology **Link:** http://www.zjkjt.gov.cn/news/node01/detail0101/2012/0101_28641.htm	*Notice on Advice for Implementation of the National Intellectual Property Strategy Compendium by Zhejiang Province People's Government*〔2009〕*No.189* issued on December 22th 2009 by the Zhejiang Province People's Government **Link:** http://www.zjpat.gov.cn/details.aspx?newsId=c644de29-7495-4cda-b341-2bc9b51beeb6

†Note: readily available 2012 patent and IP development plans included in chart to provide an idea of the one year initiatives of provinces/municipalities ostensibly meant as an additional method of implementing the multi-year plans and strategies set out. ** Refers to annual (for one year) implementing measures only.

Ⅶ Annexes

Chapter 2

Ⅶ.2.1 Quantitative patent targets from major recently-promulgated Chinese policy documents

Note: The provisions translated in this Annex are meant only to discuss patent-specific targets. This Annex does not include an illustration of different closely but more indirectly related quantitative targets that may be in some of the policy statements referenced.[24]

Ⅶ.2.1.1 Box 8: Key patent targets from the *S&T MLP*

- By 2020, China to be among the top five countries in the world in terms of annual invention patents granted to Chinese nationals

Source: China's *S&T MLP*

Ⅶ.2.1.2 Box 9: Key patent targets from China's nationwide *12th Five Year Plan*

- Invention patents owned should be increased from 1.7 to 3.3 per ten thousand people by 2015

Source: China's nationwide *12th Five Year Plan*

Ⅶ.2.1.3 Box 10: Key patent targets from China's *NPDS* (2011-2020)

- 2 million annual patent filings by 2015
- Approximately double the patent examiner workforce to 9,000
- Number of invention patents per every one million people and the number of patent applications in foreign countries will quadruple
- Market entities will be much better at the creation, utilisation, protection and administration of patents
- The proportion of patent applications in industrial enterprises above the designated size will reach 10%
- China will rank among the top two in the world in terms of the annual number of patents for inventions granted to the domestic applicants, and the quality of patents filed will further improve
- The number of patents owned per every one million people and the number of overseas patent applications filed by Chinese applicants will double
- The proportion of patent applications in industrial enterprises above the designated size will reach 8% and the quantity owning patent rights will significantly rise
- 10 model cities that can comprehensively utilise the patent system and have excellent intellectual property market environment will be established
- For reference although not a quantitative target: a large number of core patents will be acquired in some key fields of emerging industries and in key technological fields of traditional industries

Source: Author's review of *NPDS*

[24] For example, rates of filing patents electronically.

Ⅶ.2.1.4 Box 11: Key patent targets in the SC's *Notice on IPR in Strategic Emerging Industries*

- By 2015, triple the number of the invention patents owned in strategic emerging industries compared to the number in 2010
- By 2015, triple the number of international patent applications in strategic emerging industries compared to the number in 2010

Source: *SC's Notice on IPR in Strategic Emerging Industries*. Note: Translations are from the European thus are unofficial.

Ⅶ.2.1.5 Table 37: Patent targets from major and recently promulgated sub-national IP plans and strategies

Province/ Municipal-ity/ Autonom-ous Region	12th Five Year IP Plans and/or equivalent plans	Provincial IP Strategies and/or other equivalent strategies
Anhui	*IP Plan issued in 2011, targets for every year from 2011 to 2015:* • Patent applications = 20% annual growth rate • Patent applications granted = 20% annual growth rate *By the year of 2015:* • Annual patent applications ≥ 80,000 • Annual patents granted ≥ 40,000 • Invention patents owned = 3.4 per ten thousand people • The proportion of enterprises patent applications accounts for over 60% of total patent applications *Targets for the year of 2012 (from 2012 patent implementation measure):††* • Patent applications granted = 30% full-year growth • Invention Patent applications granted =40% full-year growth	No publicly available strategy
Beijing	*Beijing's IP Plan issued in 2011, targets by the year of 2015:* • Patent applications issued respectively reach up to approximately 37 and 17 per ten thousand people • Invention patent applications and granted patents respectively will reach 20 and 8 per ten thousand	*General targets only

	people, keeping the top position nationwide	
	Beijing's 12th Five Year Blueprint, targets by the year of 2015 ▪ Invention patent applications ≥ 22 per ten thousand people • Invention patents granted up to 8 per ten thousand people • PCT international patent applications up to 0.55 per ten thousand	
Chongqing	*IP Plan issued in 2011, targets by the year of 2015:* • Annual patent applications ≥ 70,000 • Annual patents granted ≥ 37,000 • Annual invention patents granted ≥ 4,000 • Invention patent owned = 3.8 per ten thousand people • Total output value of patented products worth ≥ 1 trillion yuan • Over 50% of the emerging strategy industries own key patent technologies	No publicly available strategy
Fujian	No publicly available plan	*IP Strategy issued in 2010, targets for the following 5 years:* • Patent applications and granted ≥ 12% annual growth rate • Invention patent applications and granted ≥ 15% annual growth rate • The proportion of foreign patent applications account for over 2% of the total annual patent applications
Gansu	*IP Plan is issued in 2011, targets for every year from 2011 to 2015:* • Patent applications ≥ 20% annual growth rate • Patent applications granted ≥ 20% annual growth rate • Over 70% of the enterprises in the high-tech development zones, economic and technological development zones and industrial parks own patents	*General targets only
Guangdong	*IP Plan issued in 2011, targets by the year of 2015:*	*IP Strategy issued in 2007, targets by the year of 2010:*

	• Patent applications ≥ 10% annual growth rate • Patent applications = 2,200 per million people • Invention patent applications ≥ 13% annual growth rate • Invention patent applications = 700 per million people • Number of patents granted ≥ 13% annual growth rate • Number of invention patent granted ≥ 15% annual growth rate • Double PCT international patent applications	• Patent applications ≥ 13% annual growth rate • Patent applications = 1,250 per million people • Invention patent applications = 200 per million people • Invention patent applications ≥ 15% annual growth rate • Foreign patent applications ≥ 20% annual growth rate[25] General long-term targets by the year 2020 are also included
Guangxi	*Technology and Science Development Plan is issued in 2011, targets by the year of 2015:* • Invention patents owned up to 3 per ten thousand people	*IP Strategy issued in 2009, targets by the year of 2020:* • Patent applications ≥ 20% annual growth rate • Invention patent applications ≥ 25% annual growth rate • The number of major invention patents in the key competitive industries ≥ 500
Guizhou	*IP Plan is issued in 2011, targets by the year of 2015* • Patent applications ≥ 35% annual growth rate • Number of patent applications granted ≥ 30% annual growth rate • Service invention-creation applications = 60% • 100 international patent applications	*IP Strategy issued in 2006, targets for every year from 2006 to 2015* • Patent applications and granted ≥ 15% annual growth rate *By the year of 2020* • The proportion of invention patents accounts for over 35% of total patent applications • The proportion of service invention-creations accounts for 60% of total invention patent applications
Hainan	*IP Plan issued in 2011, targets by the year of 2015:* • Patent applications ≥ 15% annual growth rate • Simultaneous increase in patents applications and those granted • Annual patent applications granted ≥ 600 • Proportion of invention patent applications ≥ 40% of total patent applications • Significantly increase foreign patent applications	*IP Strategy issued in 2010, targets for the following 5 years:* • The total number of patent applications accounts for 16,000 • Patent applications ≥ 15% annual growth rate • Invention patent applications ≥ 1/3 of total patent applications • Industrial enterprises' patent conversion rate ≥75%

[25] This is the only example of patent targets to be realised in years prior to 2012 included in this chart.

Hebei	*IP Plan issued in 2011, targets by the year of 2015:* • Annual patent applications = 25,000 • Patent applications ≥ 12% annual growth rate • Annual invention patent applications = 8,000 • Invention patent applications ≥ 15% annual growth rate	*IP Strategy issued in 2009, targets by the year of 2013:* [26] • Patent applications ≥ 15% annual growth rate • Annual patent applications ≥ 20,000
Heilongjiang	No publicly available plan	*IP Strategy issued in 2011, targets for the following 5 years* • Patent applications = 20% annual growth rate *By the end of the 12th 5 years* • Invention patents owned ≥ 2.1 per ten thousand people • Number of patent-competitive companies able to use the intellectual property rights to participate in market competition ≥ 200 *Targets for the year of 2012 (from 2012 IP implementation measure):††* • The number of patent applications ≥ 20,000 • The number of enterprises patent applications = 5,000 • The number of patent applications of universities and research institutes = 4,200
Henan	*IP Plan issued in 2010, targets by the year of 2015:* • Annual patent applications ≥30,000 • Annual patent applications granted ≥20,000 • Proportion of invention patent applications ≥30% of total patent applications • Proportion of service invention-creation applications ≥ 60% of total patent applications	*General targets only
Hubei	*IP Plan issued in 2011, targets for every year from 2011 to 2015:*	*General targets only

[26] Note: while Hebei has a 2012 *Hebei Major Tasks on the Implementation of IP Strategy*, that strategy does not contain additional quantitative targets

	• Annual growth rates of patent applications and patents granted to be ≥ 15% *By the year of 2015* • Invention patent applications and granted patents to be one time more than the amount of those in 2010 • Invention patents granted to reach up to 0.5 per ten thousand people	
Hunan	*IP Plan issued in 2012, targets by the year of 2015:* • Annual patent applications ≥ 40,000 • Average annual patent applications growth ≥12% • Dominant regions ≥ 20% of Hunan Province • Annual patents granted = 3.5 per ten thousand people • Invention patents granted to reach up to 1.6 per ten thousand people, with 3.3 in dominant regions	*IP Strategy issued in 2009, targets by the year of 2015* • Annual patent applications ≥ 30,000 • Patent applications ≥ 12% annual growth rate • Dominant regions ≥ 20% of Hunan Province • The percentage of patents owned by enterprises in industrial zones ≥ 90% • Industrial enterprises' patent conversion rate ≥70% • All high-tech enterprises and backbone enterprises own patents • Industrial enterprises above designated size with indigenous intellectual property products output value as accounted for in GDP ≥ 30% • Independent intellectual property rights and indigenous brands' exports ≥ 20% and ≥ 50% of tot al export volume
Inner Mongolia	No publicly available plan	Publically announced that a multi-year strategy is being drafted, but is not currently available (mention of strategy in 2012 work plan)[27]
Jiangsu	*IP Plan issued in 2011, targets by the year of 2015* • Invention patents owned = 6 per ten thousand people • Invention patents granted to employers in high-tech parks ≥ 100 • Number of patents issued = 400 per ten billion RMB GDP • PCT international patent applications ≥ 1,000	*IP Strategy issued in 2009,targets for every year from 2009 to2013* • Patent applications and granted ≥ 15% annual growth rate • Invention patent applications ≥ 20% annual growth rate • Foreign patent applications ≥ 30% annual growth rate • The proportion of enterprises patent applications accounts for 55% of total patent applications

[27] Note: The enactment of an IP Strategy is mentioned in Inner Mongolia's 2012 IP Work Plan.

	• Double the number of the effective patents owned and the total number of invention patent granted compared with those of "11th 5year Plan"	
Jiangxi	No publicly available plan	*IP Strategy issued in 2011, targets by the year of 2015* • Patent applications ≥ 20% annual growth rate • The total number of invention patents owned ≥13,932
Jilin	No publically available province-wide plan (although a city plan for Changchun, Jilin, for example, is available)[28]	No publically available multi-year strategy (although a 2012 strategy, with no quantitative targets, exists)[29]
Liaoning	*IP Plan issued in 2011, targets by the year of 2015:* • Invention patent applications and invention patents granted = 14% annual growth rate • Invention patents owned- no less than 3.3 per million people	*IP Strategy issued in 2008, targets for the following 5 years:* • Invention patent applications and invention patents granted = 10% annual growth rate
Ningxia	No publicly available plan	*IP Strategy issued in 2011, targets by the year of 2015:* • Patent applications and granted ≥ 15% annual growth rate • Invention patent applications and granted ≥ 30% annual growth rate • Industries with advantages locally to apply for ≥ 2000 invention patents • Quadruple the number of invention patents owned per ten thousand people
Qinghai	No publicly available plan	*General targets only[30]
Shaanxi	*IP Plan is issued in 2011, targets for every year from 2011 to 2015:* • Patent applications = 18% annual growth rate • Invention patent applications = 20% annual growth rate	*IP Strategy issued in 2008, targets for the following 5years:* • Annual patent applications ≥ 15,000 • Annual patent applications granted ≥ 6,000 • Invention patent applications

[28] Note: The Changchun, Jilin plan only sets indicators for patent applications (patent applications ≥ 15% annual growth rate; and ≥ 20% annual growth in international patent applications).

[29] Note: There is also a *2012 Jilin Major Tasks on the Implementation of IP Strategy,* which contains no quantitative patent targets.

[30] As mentioned in the *2012 Qinghai Major Tasks on the Implementation of IP Strategy*

	• PCT international patent application = 25% annual growth rate *By the year of 2015* • The total patent applications ≥ 50,000 in 2015 • Number of invention patent granted = 2.5 per ten thousand people • Number of invention patent owned = 3.3 per ten thousand people	accounts for ≥ 40% of total patent applications • Service patents applications accounts for ≥ 60% of total patent applications • Industries patent applications accounts for ≥ 40% of total patent applications
Shandong	*IP Plan issued in 2011, targets by the year of 2015:* • 80% of the industrial enterprises above the designated size have patent applications • Double the number of annual invention patents applications granted per ten thousand people • Double the number of the annual valid invention patents owned per ten thousand people Other more general targets[31]	Publically announced that a strategy is being drafted, but is not currently available
Shanghai	*IP Plan issued in 2011, targets by the year of 2015* • Invention patents granted = 600 per million people • Invention patents owned = 30 per ten thousand people • Greatly increase PCT international patent applications	Publically announced that a strategy is being drafted, but is not currently available
Shanxi	Publically announced that a plan is being drafted, but is not currently available[32]	Publically announced that a strategy is being drafted, but is not currently available
Sichuan	No publicly available plan	*IP Strategy issued in 2009, targets for the following 5 years:* • Patent applications and granted ≥12% annual growth rate • Invention patent applications ≥15% annual growth rate • The proportion of patent applications by enterprises increases to ≥ 30% of

[31] For reference, although not quantitative: "The rapid growth of the province's domestic invention patent applications and those granted"; "Further enhance the proportion of the service invention-creations of the total patent applications and granted"; "Substantially increase the PCT applications."

[32] Although a government notice (see: http://218.26.227.183:8000/zscqj/sjdt/1451.htm) indicates a 12th Five Year IP Plan has been promulgated by Shanxi, a copy of the plan does not appear readily available online.

		total patent applications *Targets for the year of 2012 (from 2012 patent development measure):††* • Patent applications = 15% full-year growth • Invention patent applications = 18% full-year growth • Enterprises patent applications = 20% full-year growth
Tianjin	*IP Plan issued in 2011, targets by the year of 2015:* • Invention patent owned = 9 per ten thousand people • Annual patent applications= 50,000 • Patent applications granted=20,000 • Double the total number of proprietary intellectual property rights	*IP Strategy issued in 2010, targets for the following 3 years:* • The total number of patent applications ≥ 200,000 • The total number of valid patents ≥ 40,000, with valid invention patents accounts for 1/3 of the total number of valid patents • The proportion of valid patents accounts for over 60% of the total enterprises patents • The number of enterprises owning patents accounts for 5,000 • The total number of foreign patent applications accounts for 1,000 *Targets for the year of 2012 (from 2012 IP implementation measure):††* • The number of patent applications = 40,000 • The number of invention patent applications = 12,000 • The number of patent applications granted = 15,000 • Invention patents owned ≥ 7.5 per ten thousand people • The number of patent applications of Binhai New Area = 13,000 • The number of patent applications of strategic emerging industries = 2,000 • Patents in force owned by pilot zone ≥ 30% full-year growth • The number of patent applications of pilot zone = 2,000

Tibet[33]	No publicly available plan	No publicly available strategy Publically announced that a strategy is being drafted, but is not currently available[34]
Xinjiang	See strategy column to the right	*IP Strategy issued in 2010, targets for the following 5 years:* • Patent applications ≥ 15% annual growth rate • Patents applications granted ≥15% annual growth rate †*Promotion Plan of Xinjiang IP Strategy (2011-2015), targets during 2011-2015:* • Patent applications and granted ≥ 25% annual growth rate • Patent applications = 30,000 • Patent applications granted = 18,000 • The proportion of invention patents accounts for over 35% of the total patent applications *By the year of 2015:* • Invention patents owned = 1.09 per ten thousand people *Other general targets *Targets by the end of 2012 (from 2012 IP implementation measure)*†† • The number of patent applications = 5,500 • The number of patent applications granted = 3,800
Yunnan	*IP Plan issued in 2011, targets by the year of 2015* • The growth number of patent applications = 25,000 • The growth number of invention patent applications = 8,500 • The growth number of invention patents granted = 2,500	*IP Strategy issued in 2008, targets for the following 5 years from 2009* • The growth number of patent applications = 22,000 • The growth number of patent applications granted = 11,000

[33] Note: nor could an annual IP Work Plan from 2010, 2011, 2012 be found for Tibet

[34] A news article from SIPO, which discusses the progress of IP work in Tibet, mentions the Tibet IP strategy is undergoing revisions; however, aside from this source, not other readily available information in Chinese was found on this Tibet IP Strategy. (Source: http://www.sipo.gov.cn/mtjj/2011/201105/t20110526_605517.html, May 29th 2011)

	• Enterprise patent applications ≥ 15% annual growth rate • Enterprise patents granted ≥ 15% annual growth rate	
Zhejiang	*IP Plan issued in 2012,targets for every year from 2011 to 2015* • Patent applications = 15% annual growth rate • Patent application granted = 15% annual growth rate • Invention patents granted = 25% annual growth rate *By the year of 2015* • Double the total number of patent applications and patents granted • Total number of invention patents granted = 20,000 • Double the number of registrations of invention patents per ten thousand people	*General targets only

Source: Author's review of readily available provincial/municipal 12th Five Year IP Plans and equivalent plans, and recent IP Strategies and equivalent strategies. Translations are from the European Chamber thus are unofficial. Note 1: The targets herein are based on the express provisions in the policies collected, whereas other targets may exist. Note 2: ✝Xinjiang's IP Promotion Plan herein is included as it spans five years. ††Note 3: These one-year implementation plans included even though they are not multi-year as they mention specific quantitative targets ostensibly for implementing the multi-year plans/strategies. Note 4: Although not all include quantitative patent development targets, it is worth noting that a one year 2012 IP promotion plan (called a Provincial/ Municipal *2012 Major Tasks on the Implementation of IP Strategy)* has been issued for the following provinces/municipalities*:* Beijing, Fujian, Gansu, Guangdong, Hebei, Heilongjiang, Henan, Hubei, Hunan, Inner Mongolia, Jiangsu, Jilin, Liaoning, Ningxia, Qinghai, Shandong, Shanghai, Shanxi, Tianjin, Xinjiang, and Yunnan; and a *2012 Major Tasks of Intellectual Property (Patent) Work* has been issued for Anhui and Sichuan. Note 5: *The following provinces state a will to greatly increase the foreign patent applications in their 12th Five Year IP Plans: Henan, Tianjin, Liaoning, and Zhejiang; and the following state such a will in their IP Strategies: Gansu, Guangdong, Guizhou, Henan, Heilongjiang, Hubei, Hunan, Liaoning, Ningxia, Qinghai, Sichuan, and Yunnan. The following provinces state a desire to develop key patents in patent-competitive industries within their province within their 12th Five Year IP Plans: Guangdong, Hainan, Hubei, Jiangsu, Jiangxi, and Shaanxi; and the following state such a desire in their IP Strategies: Beijing, Gansu, Guangdong, Guangxi, Guizhou, Hebei, Heilongjiang, Henan, Hubei, Hunan, Tianjin, Xinjiang, and Zhejiang.

Ⅶ.2.2 Example IP indicators in performance evaluations for research institutes, SOEs, enterprises, Party and other government officials, and others

Table 38: EXAMPLE IP indicators in performance evaluations from China's Provincial/Municipal 12th Five Year Plans on Intellectual Property, recent IP Strategies, and equivalent plans

Province/ Municipality/Autonomous Region	Performance-evaluation indicators from 12th Five Year IP Plans, other equivalent plans , Provincial IP Strategies and other equivalent plans
Anhui	• *IP Plan issued in 2011:* Section 5, Para1: *"Improve intellectual property coordination mechanism, and gradually increase the proportion of the intellectual property indicators in the scientific and technological progress targets within a responsible evaluation system for Party and government leaders."*
Chongqing	• *IP Plan issued in 2011:* Section 4, Part 1: *" ...Incorporate such intellectual property rights indicators as patent creation, patent performance into the review and assessment of government-funded projects, and into the identification conditions of professional and technical qualification titles for special talents."* Section 6, Part 3: *"Improving the assessment system of intellectual property, incorporate the development of intellectual property into the annual performance evaluation of the leading municipal bodies…"*
Gansu	• *IP Plan issued in 2011:* Section 5, Part 2, para. 3: *"Improving the performance evaluation system for intellectual property of indigenous innovations. Regulating technology innovation activities under the implementation of intellectual property policy, ensuring protection of intellectual property and income distribution through intellectual property industrialisation. Incorporate the output, efficiency, protection of indigenous intellectual property rights into the assessment index system of the province's innovation work, also taking these indicators as the basis of the performance appraisal, job classification and rank promotions for scientific and technical personnel. Perform a sample survey to gauge recognition of IP, guiding education regarding IP elements among citizens, and attempting to establish a comprehensive indicator system to analyse the intellectual property situation."* Section 4, Part 2, para. 2: *"Implementing the responsibility system for administrative work of Intellectual Property, incorporate the implementation of Intellectual Property Strategy work into the target responsibility assessment…"* Section 5, Part 1, para. 2: *"Implementing the responsibility system and accountability system. Governments at all levels should incorporate the IPR creation, management, protection and use into the government target assessment system as an important indicator of the annual work and the year-end performance assessment."*

Guangxi	• *Technology and Science Development Plan issued in 2011:* Section 4, Part 3, Para. 1: *"Establish and improve the science and technology statistics, monitoring and evaluation system, optimise the assessment of target responsibility system on science and technology progress of municipal and county Party and government leaders."* Section 4, Part 5: "*Deepening the pilot demonstration of intellectual property rights, incorporating intellectual property rights indicators into the performance appraisal system of the indigenous innovation of enterprises, universities, research institutes and other innovative subjects."*
Hainan	• *IP Plan issued in 2011:* Section 4, Part 3: *"Developing patenting promotion and innovation mechanisms. Speed up the establishment of making enterprises the main body of the patenting mechanism, guide the system and structure of patent management, and promote patent innovation and application of enterprise units. Maintain engineering technical centres, research and development centres, and high and new technology enterprises, and make IPR core patent technology of science and technology project planning and important basis. Reinforce IPR management of science and technology project planning and approval and establish at the provincial and citywide level the IPR management mechanisms of this project planning and approval. Make the obtainment of indigenous IPR the most important prerequisite for the examination and acceptance of project planning for important science and technology project planning and innovation platforms. Gradually establish an IPR examination and expounding system for Hainan's important science and technology innovation projects. Incorporate indigenous IPR output quantity, quality, implementation benefits, and IPR system construction condition into the project evaluation index system and conduct supervision and management."* Section 4, Part 5: *"Further improving the assessment of patent work, consider patent work performance as one of the necessary conditions for performance evaluation of corporate technology centers, high-tech enterprises and hi-tech industrial parks. Incorporate the management performance of patent work, including the amount of R & D investment, the quantity and quality of patents, patent transformation, patent transfer and patent licensing, into the annual performance management assessment indicators for the relevant administrative departments, encouraging innovation."*
Henan	• *IP Plan issued in 2010:* Section 4, Part 5: "*Considering the results of the intellectual property assessment as an important part of the target responsibility performance evaluation of the municipal and district Party and government leaders for the scientific and technological progress and talents cultivation.*"
Jiangsu	• *IP Plan issued in 2011*: Section 4, Part1, para1: *"Improve the intellectual property strategy and implementation of the performance evaluation system, the establishment of a scientific management system of patent examination, and to strengthen the implementation of performance assessment."* Section 4, Part 2, Para 1: "*Strengthening catalogued evaluation on invention performances of universities and institutes, and obtaining original patents*

	should be the key elements of evaluation on basic research and cutting-edge technology research, obtaining invention patent and utility models should be the key elements of evaluation on applied research, developed research…improving patents grants and rewards system, enacting 'Measures on Patent Rewards in Jiangsu Province' to stimulate inventing and improve patent quality." Section 4, Part 3, Para 1: *"Establishing positive interaction mechanism of patent transfer from institutions of higher-learning, scientific research institutions to enterprises, incorporating patent transfer into the research performance evaluation, promoting patent utilisation and industrialisation."* Section 5, Part 1: *"Establishing a scientific work performance assessment mechanism, taking the scientific patent management as the important indicator to measure the implementation of Scientific Outlook on Development and to measure the regional development capacity. "*
Liaoning	• *IP Plan issued in 2011:* Section 3, Part 2, para. 2: *"…Including intellectual property indicators in the science and technology implementation and evaluation system as well as in the performance evaluation system of SOEs. Encouraging high-education institutions and universities to take into account the quantity, quality and application of intellectual property in the job classification, rank promotion and other performance evaluation index systems of the faculty and research staff; increasing the proportion of intellectual property in the science-technical evaluation system…."* Section3, Part 2, para. 3: *"…Put the year-on –year growth rate of China invention patent applications' into the government performance evaluation system…"*
Shaanxi	• *IP Plan is issued in 2011:* *Section 4, Part 2: "…Establishing a comprehensive evaluation mechanism for intellectual property performance, scientifically assess work performance of all levels of government and enterprises and institutions …"* *Section 3, Part 7: "…Focus on the establishment of evaluation system of intellectual property rights for large and medium-sized SOEs…"*
Shandong	• *IP Plan issued in 2011:* Section 3 Part 1 Para 2: *"Establishing IPR Strategy Implementation Evaluation Mechanisms. Perfect the evaluation mechanism of provincial, city-wide, and district-wide IPR leadership by holistically bringing into play function evaluation, strengthening inter-department cooperation, actively creating collaboration, clearly dividing labour, and jointly promoting a working atmosphere of IPR implementation strategy. Establish an IPR performance evaluation index system. Include the state of strategy implementation into the annual government performance goals on a departmental, municipal, and district-wide level. Periodically analyse and evaluate the state of IPR strategic implementation.* *Section 3, Part 2, Para. 2: "Incorporating the annual patents granted and the number of invention patents owned per ten thousand people into the government assessment indicators."* *Section 3, Part 6, Para 2: "Actively promote patent professionals into the range of job classification."*

Sichuan	• *IP Strategy issued in 2009:* *Section 3, Part 4:* "*Establishing the target assessment and statistical* index system of government intellectual property work, incorporating the number of intellectual property owned and the effectiveness of patent transformation into the economic *and social development statistics.*" *Section 5, Part 3, Article 1*: "Incorporating intellectual property indicators into such evaluation systems as the identification of high-tech enterprises, the evaluation of enterprise technical innovation activities and performance appraisal of SOEs." *Section 5， Part 5, Article 2: "Give full play to the important role of colleges and universities, research institutes in the creation of the indigenous intellectual property rights. Strengthen scientific and technological work in intellectual property management, own intellectual property as a scientific and technological innovation, an important indicator of the use of intellectual property as important indicators of the evaluation of scientific and technological competitiveness, and promote colleges and universities, research institutes of intellectual property rights are transferred to the enterprise to promote the universities, research institutes, intellectual property rights of indigenous innovation, commercialisation, industrialisation."* *Section 6, Part1: "Incorporating the implementation of intellectual property strategy into the important aspects of government target assessment."*
Tianjin	• *IP Plan issued in 2011:* Section 4, Part 3, Article 1:" …*Formulating the Tianjin Guideline on the SOEs' Implementation of Intellectual Property Strategy, further promoting incorporation of intellectual property into the performance evaluation index of SOEs…*" Section 4, Part 5, Article 2:" …*Incorporate the quantitative indicators of intellectual property rights and the economic benefits gained from intellectual property rights utilisation into the performance appraisal, job promotion and reporting incentives for professional and technical personnel*." Section 4, Part 6: "*Strengthening the intellectual property-oriented work in multiple and district level of technology projects, industrialisation projects and all kinds of technological innovation and industrialisation platform, Incorporating the acquisition and implementation of patents into the assessment index of project-application and project-acceptance"* Section 5, Article 3: "*Incorporating the work performance of intellectual property into the performance evaluation index system of Party and government leading cadres and the person in charge of SOEs."* Section 5, Article 4: *"Strengthening the significance of intellectual property in the recognition and evaluation process of a municipal enterprise technical centres, engineering technical centres, engineering centres and key laboratories, and incorporate the invention, applications, protection and management of intellectual property into the performance evaluation index system"*

Zhejiang	• *IP Plan issued in 2012:* Section 5, Article 4: "*Establish the evaluation index system, incorporate patent indicators into the evaluation system of economic development and society progress; strengthen the supervision of the local patent work, guidance and assessment. Further establish and improve enterprises, especially patent statistical indicators of patent pilot demonstration enterprises.*" Section 3, Part 1: "*Establish and improve the patent appraisal review mechanism of provincial major economic activities, considering the evaluation of intellectual property rights as the core of the review mechanism…taking the patents owned, especially the invention patents owned indicators as the important consideration of the identification and the evaluation of high-tech enterprises, provincial major innovation platform, industrial technology innovation, strategic alliances and other innovative carrier, also as the important index of the job classification and rank promotion for professional and technical personnel of institutions of higher-learning and research institutes.*"

Source: Review of provincial/municipal 12th Five Year IP Plans, recent IP Strategies, and equivalent plans and strategies. Note: This is a non-exhaustive list of performance evaluation criteria from all of these plans. Also, there may be other articles within the policies cited herein that are not mentioned hereto but also relate in some ways to patent-related performance evaluations. Translations are from the European Chamber thus are unofficial.