

Draft Regulation on Employee Invention and Innovative Workers Protection in China

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In the Era of digitalization and artificial intelligence, the technology is advancing rapidly. The patent power which is nourished and emerged mostly in the workplace in nowadays symbolizes the innovative capability of a society. However, the employee invention² was not considered a typical “labor” issue in China, and the government is reluctant to strengthen protections on innovative workers, especially in the private sector. Nevertheless, during the public discussion on *Draft Regulation of Employee Invention*, workers and their trade unions lost voices contrary to fierce oppositions from employers. In this report, the law-making process of *Draft Regulation of Employee Inventions* was illustrated. Under the New-Normality of economy slow-down and the great pressure of unemployment, China government has stepped into a “dilemma” in policy making to balance interests within labor relations. However, innovations will concern new industries and new employment in future. In the context of “Mass Entrepreneurship and Innovation,” it is important to make such a public conscience that innovative workers will not contribute to innovations unless they are respected and protected. In China’s labor relations, legal protections on innovative workers are expected to activate innovations in the workplace or in whole China society.

I. Why legislation on employee inventions

In the rush of globalized competition, the innovation power has been regarded as the crucial competitive factor in one country. As to China, other than technology and industry competition in the world, the innovation is expected to support the economy transformation as well as employment creations. Therefore, the government appealed its new policy as “Mass Entrepreneurship and Innovation.”³ The twin engines are expected to drive China out of the moss of “New-Normality” and to contribute to the economy growth in future.⁴ “Mass Entrepreneurship and Innovation” bridges investments, inventions and employments in a social context. Inside, the stimulation of innovations in itself is the purpose of the policy. In the Government Work Report of 2015, Premier Li declared that the government would promote, business startups and social innovation, to increase the employment and residents’ income, and to improve social mobility and social justice.⁵

Inside, the holding patents are usually considered as a core standard reflecting the innovation power

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2 Employee invention is defined as “servant invention” (Zhi Wu Fa Ming).

3 “Wan Zhong Chuang Ye, Da Zhong Chuang Xin” was firstly claimed as a new policy to promote employment. Premier Li explained the twine engines as of “mass entrepreneurship” or “grass-root entrepreneurship” to encourage young peoples for new start-ups in order to moderate pressures on the unemployment; in addition, the policy aimed to encourage innovations by the mass and individuals.

4 To show the government attitude on social innovation, Premier Li met with individual Mak-ers (Chuang Ke) every time during his tours of local inspections.

of the country. According to the latest WIPO report,⁶ China has contributed the largest patent filings in the world in the year of 2015,⁷ overriding U.S.A. and Japan. In addition, patent application increased 18.7% in 2015, and the international patent applications reached to 43,000 succeeding to U.S.A and Japan in 2016.⁸ It is said that China is driving the innovations in the world.⁹ However, other than the great quantities of patent filing, China concerns more about the quality and utility of innovations. In accordance with IEEE's report on the patent power in 2016,¹⁰ among sixteen industries only four Chinese enterprises were ranked in, and at the same time only Tsinghua University ranked as the 16th among the world's most innovative institutes or universities.¹¹ Contrary to increasing patent numbers, the total factor productivity (TFP) in China, which reflected the substantial innovation power, declined from averagely 4.9% (during from 2000-2007) to 2.21% (during from 2008 to 2014).¹²

Confronting the laggings from developed countries, China government recognizes both quantities and qualities of patent inventions are crucial to level up its innovation power. Since over 90% patents are employee inventions in developed countries, how to regulate employee inventions so as to stimulate workplace innovations has been determined as a priority intelligent property legislation in China. Besides investment stimulation and IP rights protection, the bottle neck hindering China's innovation is how to dig out the inventive potentials in human resources.

II. Policy pavement

In pursuit of possible leap-forward development in innovation powers, China government made new policies and law amendments on this regard. Prior to the slogan of "Mass Entrepreneurship and Innovation," China government has decided to add motivative instruments for innovator workers. In the year of 2010, China government firstly issued *National Planning of the Development of Manpower in Medium or Long Term from 2010 to 2020* ("*National Planning of 2010-2020*"), in which *Regulation of Employee Invention* is included to enhance the legal protections on IP rights as well the benefits sharing system within the workplace innovation.

In March of 2015, CPC Central Committee and the State Council issued *Several Opinions on Deepening the Reform of Systems and Mechanisms to Accelerate the Implementation of Innovation-driven Development Strategies*,¹³ emphasizing to employ the market mechanism in stimulating social creations

5 The General Office of State Council issued "*Implementation Opinions on the Establishment of Demonstration Base of Mass Entrepreneurship and Innovation*" (Guan Yu Jian She Da Zhong Chuang Ye Wan Zhong Chuang Xin Shi Fan Ji Di de Shi Shi Yi Jian, Guobanfa[2016]35) on May 12, 2016.

(http://www.gov.cn/zhengce/content/2016-05/12/content_5072633.htm). According to Article 3(4), to promote talents' mobility, experts and technical personals in public sectors are encouraged to start their own businesses or have by-business in enterprises so as to improve the mobility of innovators.

6 Global Patent Applications Rose to 2.9 Million in 2015 on the Strong Growth from China, WIPO Geneva November 23, 2016, http://www.wipo.int/pressroom/en/articles/2016/article_0017.html (latest visit on March 19, 2017).

7 World Intellectual Property Indicators 2016, WIPO Economics & Statistics Series, p.8, http://www.wipo.int/edocs/pubdocs/en/wipo_pub_941_2016.pdf (latest visit on March 19, 2017).

8 Approaching to U.S.A. and Japan: China's Patent Applications Increased 45% in 2016, Wallstreet.cn Shanghai, <http://wallstreetcn.com/node/295652> (latest visit on March 19, 2017).

9 Ibid, n7.

10 IEEE Interactive: Patent Power 2016, <http://spectrum.ieee.org/static/interactive-patent-power-2016>.

11 For each industry, there ranked top twenty corporations or institutes according to the pipeline power, in which the pipeline power is determined by four factors namely patents number, the growth index, the impact, the originality and the generality. Pipeline Power = (Number Of Yearly Patents) X (Pipeline Growth Index) x (Adjusted Pipeline Impact) x (Pipeline Originality) x (Pipeline Generality).

12 China leads patents increasing for five years in the world, but how about the patent qualities? Yicai.com, Feb 15, 2016, <http://www.ithome.com/html/it/206365.htm> (latest visit on March 19, 2017). Also see Fan Jianping, "The Economy Situations in 2016 and the 13th Five Years Planning in China," State Information Center, <https://wenku.baidu.com/view/a845fcb2f01dc281e43af085.html>.

13 "Zhong Gong Zhong Yang Guo Wu Yuan Guan Yu Shen Hua Ti Zhi Gai Ge Jia Kuai Shi Shi Chuang Xin Qu Dong Fa Zhan Zhan Lve de Ruo Gan Yi Jian," issued on March 13, 2015.

and innovations. Especially, technical personals and R&D staffs should share benefits including economic and moral rewards from the innovative work. In addition, the free mobility of innovation related resources such as human resources, capitals, technologies and knowledges should be guaranteed.

In parallel to the new legislation on employee inventions, which covers workplace innovations either in public or private sectors, the amended *Law on Promoting the Transformation of Scientific and Technological Achievement* (herein refers to “PTSTA”)¹⁴ was promulgated in October 2015, to promote the utility and industrialization of scientific achievement outside of employee inventions. In particular, researchers subordinated to public institutes or universities (the public sector) are encouraged to begin their own business, or to mobilize between enterprises and the public sector.¹⁵ Moreover, there are several new instruments introduced in PTSTA to reallocate benefits between the researchers and the enterprises due to the achievement transformation.

By contrast, the law-making on employee inventions ceased. The Draft Regulation which embarked in 2012 and was passed to the State Council in 2014, however, after hearing public opinions especially opponents’ voices from employers, has been put aside. Instruments on benefits sharing and interest protection within employee inventions divide workers and employers far apart. In practice, innovative workers insist on voting with their feet. What’s wrong with employee invention system of China? To answer this question, it is necessary to have a look at the current legal system on employee inventions.

III. Current legal framework of employee inventions

In tradition, there is no doubt in China that the patent right of invention belongs to the employer. In the first patent law enacted by the Republic of China in 1940s, employee invention was regulated as an employer’s asset which excluded workers. The concerns within legal regulations focus on the reward and compensations for innovator workers. For mainland China, employee invention is mainly regulated by *Patent Law of People’s Republic of China* (issued in 1984, amended in 2000 and 2008) (herein refers to “Patent Law”).

1. Definition of employee inventions

According to Patent Law (Article 6), employee inventions can be categorized into three types — namely employee inventions, employment-related inventions, and non-employee inventions. Later on, *Detailed Rules for the Implementation of the Patent Law of People’s Republic of China* (issued in 2001, amended in 2002 and 2010) (herein referred to as “Detailed Rules”) issued by the State Council further extended the scope of employee inventions (Article 12).

(1) Employee inventions

Employee inventions are those made by an employee in the following circumstances: (1) in performing work or tasks for the employer during the employment; (2) primarily using material or technical means including the funding, facilities, parts and components, raw materials and private know-hows of the employer; or (3) inventions relevant to the original work or tasks created within one year following the termination of the employment relationship. The patent right of such invention belongs to the employer.

(2) Employment-related inventions

Employment-related inventions are those made by an employee using but not primarily any material

14 “Cu Jin Ke Ji Cheng Guo Zhuan Hua Fa,” issued in 1996 and amended in 2015, http://www.most.gov.cn/fggw/fl/201512/t20151203_122619.htm.

15 To maximize incentives for innovations by means of the achievement transformation, public employees can maintain their employment relations for at largest 3 years in the public sector after they start up their own businesses; or they could conduct part-time work in enterprises with the approval from the public employer. Article 2(7) of the *Notice of Several Regulations on Implementation of PTSTA*, by the State Council (Guofa [2016]16), effective as of February 26, 2016. http://www.gov.cn/zhengce/content/2016-03/02/content_5048192.htm.

or technical means of the employer. The patent right in such circumstances is governed by the agreement between the employee and the employer.

(3) Non-employee inventions

Non-employee inventions are those which are neither employee inventions nor employment-related inventions. For such inventions, the patent right belongs to the employee.

Since the broad definition on the employee invention, dually guaranteed by laws and the employment contract, the employer is possible to claim any inventions for patent rights made by the employee.

2. Rewards and remunerations for inventor employees

What could inventor employee benefit from the invention? Although the patent right belongs to the employer, the inventor employee is entitled to claim rewards once the patent is granted. In addition, the inventor employee is entitled to claim for a reasonable remuneration when the patent is utilized and generates economic benefits (Patent Law, Article 16). This reward and remuneration mechanism was enriched and strengthened by Detailed Rules in Chapter 6, by stipulating that the reward and the remuneration (including the amount and the payment way) related to employee inventions can be agreed in the employment contract, or can be governed by the enterprise's rules.¹⁶ Otherwise, the statutory standards on rewards or remuneration are applied.

(1) Minimum rewards

According to Article 77 of Detailed Rules, the inventor employee is entitled to claim for rewards of no less than RMB 3,000 (around USD 434) for each invention patent within three months of the patent license date; for rewards of no less than RMB 1,000 for each patent of utility model or design patent.

(2) Minimum Remunerations

In this regard, the inventor employee's remuneration should be paid annually throughout the validity period of the patent or by way of a corresponding lump-sum payment (1) at no less than 2% of the operating profit generated from the exploitation of an invention or utility model patent, or (2) at no less than 0.2% of the operating profit generated from the exploitation of a design patent; or be paid at the time of licensing no less than 10% of the royalties generated when the patent is authorized to others by the employer.

Thus the employer bears the obligations to pay rewards or remuneration to inventor employees, however the rewards or remunerations could be arranged by the employment contract or corporate policies in advance. The minimum standards on rewards or remunerations herein are not applied similar with labor standards, which means they could be much lower than the minimum standards in practice.

Here above is the whole picture of the legal arrangement on the rights and benefits related with employee inventions by laws. Seemingly the employer favors much more than innovative employees, for they have the patent rights and they decide what they can share with innovative workers. To some extent, it induces the employer and employees to play the game of "all-or-nothing." Indeed, under the current regulations on the employee inventions, a lot of disputes have been brought by both the employer, and employees which is making a great challenge to China's innovation. According to a recent survey conducted by State Intellectual Property Office,¹⁷ among 147 cases related with employee inventions decided by the people's court, most cases claimed for the judgment on whether the invention should be classified as employee inventions or not. Nearly 76% cases are claimed by the employer while 24% by employees. However, the difficulty to win those law suits is the same to both parties for which employees win 48% law suits while employers win over 50%. As for disputes on rewards or remunerations, employees are usually frustrated claiming that they failed to prove the reasonableness of the payments,

¹⁶ Detailed Rules, Article 76.

¹⁷ Survey on Disputes on Entitlements and Rewards within Employee Inventions, 2014.

for the employer might squash the benefits by low-price delivery, undefined profits, or even non-use at all.¹⁸ In another investigation on the enterprises' policies,¹⁹ the findings coincide with the disputes reality. According to the investigation, there are 62.9% enterprises with no internal policies on rewards or remunerations to innovator employees. In addition, 57.8% enterprises paid nothing for employee inventions.

As the local reform on employee invention regulations, in June 2013, the Shanghai Higher People's Court issued *Guidelines on the Adjudication of Disputes Involving Rewards and Remuneration for Inventors or Designers of Service Invention Creations* ("Shanghai Guidelines").²⁰ The Shanghai Guidelines have clarified some fundamental issues. For example, the key tone set by the Patent Law is that agreements between employee and employer prevail over the statutory minimum amounts. Despite this, as for the reasonableness of rewards or remunerations, the Shanghai Guidelines clarified that under normal circumstances, the agreements will be deemed reasonable, except if the agreed amounts are extremely low and obviously unreasonable. In addition, the most important is that the court will testify the legitimacy and validity of the agreement in accordance with Contract Law and Labour Contract Law.²¹ For an instance, the enterprise's policy on employee inventions should only be binding if it was made in due procedure by (labor) laws.

By now, regulations on employee inventions are no longer pure issues about IP rights. They are more about "labor" as its nature determined. And the balance between the employer and innovative workers is becoming the purpose of new regulation.

IV. Draft regulation on employee inventions

To correspond with the *National Planning of 2010-2020*, in the year of 2014, the Intellectual Property Office of China completed the *Draft Regulation of Employee Invention* (April 1, 2014, herein referred to as "Draft"), and later in April of 2015 it was published by the State Council for public discussions. The Draft was based on official opinions from related governor entities²² and raised the social concerns. However, contrast to broad oppositions from the employers' side,²³ there are few voices from the workers.

There are 44 articles of the Draft Regulation. The new regulation is aimed at strengthening the protection on inventor employees and increasing their benefits shares. The Draft Regulation adopted three principles precisely to encourage employee inventions, to balance rights and duties, and to respect the agreement and to protect the above minimum standards.

18 Explanations on Draft Regulation on Employee Inventions, the State Council issued on April 2nd 2015, http://www.sipo.gov.cn/ztl/ywzt/zwfintzl/tlcayj/201504/t20150413_1100584.html.

19 Employee Inventions should be Special Legislated, China Legal Daily April 5, 2016, http://www.sipo.gov.cn/ztl/ywzt/zlfjqsszdxscxg/xylzlfxg/201604/t20160405_1259850.html.

20 Zhi Wu Fa Ming Chuang Zao Fa Ming Ren huo She Ji Ren Jiang Li Bao Chou Jiu Fen Shen LI Zhi Yin, June 2013, <http://shfy.chinacourt.org/article/detail/2013/06/id/1017868.shtml>.

21 Article 5, Shanghai Guidelines. In addition, dispatched workers are entitled to claim rewards and remunerations to the employer. However, there are some shortcomings such as restrictions on the amount of rewards or remunerations claimed by the employee in case there was no agreement or internal policies on regard.

22 The Draft was based on discussions and opinions from the National Intellectual Property Office, Ministry of Education, Ministry of Technology, Ministry of Industries and Information, Ministry of Human Resources and Social Security, Ministry of Agriculture, State-owned Assets and Administration Commission, Bureau of Copy Right, State Forestry of Administration, Patent Protection Association of China, China Association of Invention. However, in this process, All China Federation of Trade Union was not involved.

23 To collect the opinions from employers, Patent Protection Association of China held a national conference in Beijing on February 27 of 2015, to introduce the draft contents to enterprises. It is to be noted that the conference is the only one recorded national conference directly to the related parties in employee inventions.

1. Report System

To avoid disputes on patent right, the Draft Regulation transplanted the report system to create chances for mutual negotiation between the employer and inventor employees.²⁴ Unless agreed in contract or prescribed in laws, inventor employees are obliged to report any invention related to work to the employer within two months since the invention completed. In case of cooperative invention, the reporter should have the consents from all inventors. To protect the right to be named in the invention patent, the report should list all inventors' names. In addition, employees should demonstrate whether the invention should be regarded as employee invention or not, including reasons beneath.

By contrast, the employer bears the duty to respond to the report timely, which requires him to reply in written form within two months after receiving the report. Otherwise, no timely reply will be regarded as the implied consent towards employees' report.

In case inventor employees disagree with the employer's reply, inventor employees may bring adverse opinions in two months. The employer may disagree again. The disagreement on the invention nature can be mediated by IP administration or resolved in a lawsuit.

This report system is the legal transplanting from France and Germany. It is considered the two-round negotiations that will be helpful to reduce patent right disputes. Once the invention is regarded as employee invention by both parties, the employer is obligated to notify employees how he would deal with the invention in six months, to file domestic IP, to protect as a know-how, or to be opened to the public. Especially during the patent filing, the employees have the right to know the whole process. In case the employer withdraws the filing or wave the patent right, inventor employee may have the IP right or as the patentee for patent application. Meanwhile, the employer will keep the shop right on the patent or IP right.

2. Right to rewards and remuneration

Firstly, in Chapter IV of Draft Regulation, the payment of rewards or remunerations becomes a legal right of inventor employees. This right can be extended after the termination of the employment, or be inherited if the inventor employee dies. In addition, the right to rewards and remuneration is not retrospective, which means the employers are not allowed to ask for payment return when the invention fails in patent license.

Secondly, rewards and remunerations can be determined upon the contract agreement, or regulated by enterprise policy; however for the latter situation, the policy has to be made in (labor) laws. It is noted that the Draft Regulation illustrates contents which should be included in the contract or policy as the procedure, the payment way, the amount, and the relief. Any agreement or policy excluding the right to rewards or remuneration is null. The employer should hear from inventor employees before he decides the payment way and the amount of rewards or remunerations. In short, the due procedure is emphasized during the process.

Thirdly, to enhance the benefits share, the Draft Regulation increases the minimum standards on rewards and remuneration. The total amount of patent invention rewards for all inventor employees should not be less than double monthly average wages of all workers, unless there are different arrangements in contract agreements or enterprise policies. Similarly, in regard to the remunerations, in Draft Regulation, there are four payment ways to be selected as the minimum standards for patent inventions: (1) no less than 5% of business net profits for yearly payment; (2) no less than 0.5% of sales figures for yearly payment; (3) reasonable times of average monthly wages for yearly payment comparing with the amount calculated in (1) and (2); or (4) a reasonable amount by a lump-sum payment according to calculations in (1) and (2). At last, all remunerations can be up to 50% business profits.

Besides, if the employer delivers or license the IP rights to others, inventor employees should be

²⁴ Chapter III, Draft Regulation.

remunerated no less than 20% of related income.

The Draft Regulation aroused great criticism from the employer side. Especially for the minimum standards on rewards and remunerations, enterprises complain that these standards are too high to implement, or these statutory provisions look more like labor standards which might conflict with market doctrine.²⁵ In addition, the report system requires more inputs on the corporate management. In short, the new rules “cost” employers too much for they have to do something new which they needn’t before. Contrary to chaos from the employer side, nearly nothing was heard from workers. Neither ACTFU nor labor academics are willing to show their attitudes since employee inventions are traditionally considered as an IP issue or individual issue which is quite distant from normal labor concerns.

V. Conclusion: beyond the draft regulation

Under the pressures from the employer side, the *Draft Regulation* is sheltered now. For example, according to *Shanghai Guidelines and Draft Regulation*, the legitimacy of contract agreement or enterprise policy should be testified by laws. That means labor laws should also be applied. There are at least several classic topics on employee inventions deserving consideration from labor side: how to consider the due procedure when the employer makes the corporate policy herein; how to verify the true will of a contract arrangement; what nature of the compensation to employees when the employer changes patent application for the know-how, and so on. Moreover, it is the time to think about what role trade unions should play. Can collective agreement govern the employee inventions? Can trade union help in related disputes? In the context of social innovation in China, the regulation on employee invention goes far more than protections on individual talent, and it is about all innovative workers. When we face the innovation challenge, we should be ready to carry out what we inherently thought to be done for the time.

²⁵ Jiang Ge, Dilemmas of Regulations on Rewards and Remuneration of Employee Inventions and Practical Wayout, *China Legal Science* 2016, Vol. 3.