Review of the Patent System in Hong Kong

Consultation Paper

SYSTEM SYSTEM

Commerce and Economic Development Bureau
Intellectual Property Department

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FOREWORD

Effective protection of the fruits of creative ideas helps nurture creativity. In offering protection to technological advancements in the form of inventions, the patent system is an important tool in encouraging developments in different scientific and technical fields.

The Government is committed to providing an effective patent regime, as part of the infrastructure that would help drive the growth of our economy.

The current patent system of the Hong Kong Special Administrative Region (Hong Kong) has been in place for more than a decade, affording statutory protection that meets international standards. To ensure that the system continues to meet present-day circumstances and that its future positioning is in alignment with our vision to develop Hong Kong into a regional innovation and technology hub, we have decided to conduct a comprehensive review, taking into account the latest international developments in patent protection.

To kick-start the review process, a public forum was held on 28 February 2011. Some 170 representatives from the legal, patent, research and development, academic and industrial sectors attended the forum and shared with us their views. Their initial observations and the main issues relating to whether and if so how the patent system should be enhanced with a view to serving the best overall interest of Hong Kong's ever evolving knowledge-based economy are set out in this consultation paper.

We have an open mind on how the various issues raised in this consultation paper should be addressed. We also welcome suggestions on other facilitation measures that may be introduced to the system, in the interest of encouraging local innovation and attracting overseas research and development centres to set up their operations in Hong Kong. We shall consider your views carefully before formulating the Government's proposals.

GSo

Gregory K L So Secretary for Commerce and Economic Development

EXECUTIVE SUMMARY

The current patent system in Hong Kong

Under the current system, two types of patents are granted in Hong Kong, namely standard patents and short-term patents. The maximum term of protection of these two types of patents is 20 years and eight years respectively.

The grant of a standard patent in Hong Kong is based on a patent granted by one of three "designated patent offices". Hence, our current regime is sometimes referred to as a "re-registration" system. Patentability is subject to substantive examination by the designated patent office before grant.

As a supplement to standard patents, the short-term patent system in Hong Kong offers protection to inventions with a shorter commercial life. An applicant may file his application direct with the Hong Kong Patents Registry. The grant of a short-term patent is based on a search report from an international searching authority or one of the three designated patent offices. The report sets out the existence or otherwise of any prior art in relation to an invention. Patentability is not subject to substantive examination before grant.

Since the Hong Kong Patents Registry does not need to recover costs that may otherwise be incurred in conducting searches and/or substantive examination for a second time, the fee for obtaining the grant of a standard patent or a short-term patent in Hong Kong is not expensive. The application procedures are relatively hassle free.

Patent agency is not a regulated profession in Hong Kong. Any person (so long as he resides or has a place of business in Hong Kong) may act as an agent for others or carry on the business of a patent agent.

Purpose of the review

Whilst the current patent system has been generally accepted as user-friendly and cost-effective, diverging views as to whether it would continue to meet the changing needs of our economy have emerged in recent years.

Some users consider the requirement of first obtaining a patent from a designated patent office expensive and/or inconvenient for applicants with limited resources or those who want to seek the grant of a standard patent in Hong Kong only. There are growing calls for bringing in an "original grant" patent (OGP) system which allows an inventor to apply for a standard patent direct in Hong Kong.

At the same time, individual users point out that the current short-term patent system is prone to abuse and advocate the introduction of substantive examination on the patentability of an invention before or after grant. This, they argue, would provide greater certainty about the validity of the patent and help avoid unnecessary litigation and deter abuse of the system.

Others propose the establishment of a regulatory regime for patent agents on the premise that this would benefit parties seeking protection, enhance the credibility of the patent agency profession, and offer a wider range of career opportunities to local graduates with science and technical background.

It is against the above background that we have decided to embark on a review of our patent system. Looking ahead, the Government is committed to maintaining an effective patent protection regime in Hong Kong, with a view to creating an environment that is conducive to attracting talent and sustaining the further healthy development of Hong Kong as a regional innovation and technology hub.

Issues for consultation

The key issues on which we wish to seek your views and comments in this consultation exercise include but are not limited to the following -

Standard Patents

- (a) whether an OGP system should be introduced in Hong Kong;
- (b) irrespective of the answer to (a) above, whether the current "re-registration" system should be maintained, and if so, whether the system should be expanded to recognize the patents granted by other jurisdictions;

Short-Term Patents

- (c) whether the short-term patent system should be retained as a supplement to standard patents;
- (d) assuming that the short-term patent system is to be retained, whether and if so what measures should be introduced to enhance the efficacy of the system; and

Regulation of Patent Agency Services

(e) whether the provision of patent agency services in Hong Kong should be regulated, and if so, what form the regulatory system should take.

Possible options

In each of the three Chapters that follow, we have outlined the key features of the current regime and the situations in some other jurisdictions. We may draw reference from the experience of different jurisdictions when mapping out a system that best suits the needs of Hong Kong.

We have also presented possible options for addressing the issues identified together with relevant considerations. The possible options and considerations so included mainly serve to stimulate public discussion. They are not meant to be exhaustive.

We welcome your views. Other options may be formulated in the light of feedback and suggestions from the public.

We seek your views

You are earnestly invited to take time to read this consultation paper and contribute to the discussion.

Chapter 1

Standard Patents

History

- 1.1 Before 1997, a person who had obtained a patent in the United Kingdom (UK) or a European patent designating the UK could have his patent registered in Hong Kong within five years of its grant. The patent would be effective in Hong Kong for so long as the corresponding UK or European patent remained in force.
- The Administration started a review in 1986 to localise the patent system. A Patent Steering Committee (PSC) was formed with members drawn from practitioners in the legal and patent fields to advise the Government on this. After thorough deliberations, the PSC submitted its report (PSC Report) to the Government in 1993. That led to the enactment of a new Patents Ordinance (Cap. 514) (the Ordinance) in June 1997.
- 1.3 Under the Ordinance, two types of patents are granted in Hong Kong, namely standard patents and short-term patents.
- The process of acquiring a standard patent in Hong Kong is sometimes referred to as a "re-registration" system (please see paragraphs 1.7 to 1.11 below). The PSC favored such a system on the grounds that it would be easier and quicker to implement as well as simple and inexpensive for users, relative to the alternative of having an "original grant" patent (OGP) system in Hong Kong whereby we would need to fund and develop the expertise and technical database required for conducting searches and examination. The PSC considered it unlikely that many businessmen would wish to apply for an original Hong Kong patent alone, as such a patent would protect their inventions only in Hong Kong but not in other parts of the much wider global market¹. There was the concern that there would be insufficient applications to cover

PSC Report, paragraph 4.42.

more than just a small fraction of the costs in running an OGP system with search and examination capacity².

- As a supplement, the short-term patent system was introduced to offer protection for products having a shorter commercial life cycle. It gives the applicant immediate protection in Hong Kong and a right to priority under the Paris Convention for the Protection of Industrial Property³ when he seeks patents or petty patents abroad in countries where he intends to market his product⁴.
- 1.6 This Chapter focuses on the standard patent system. We will return to the short-term patent system in Chapter 2.

Procedures for Obtaining a Standard Patent in Hong Kong

- 1.7 A standard patent is granted in Hong Kong on the basis of a patent granted by one of three "designated patent offices", namely the State Intellectual Property Office (SIPO) of the People's Republic of China, the UK Patent Office (UKPO) and the European Patent Office (EPO) for patents designating the UK. The period of protection for a standard patent, subject to renewal, may last for a maximum of 20 years.
- In 2010, out of the 11 702 applications for a standard patent filed in Hong Kong, 56.9%, 40.1% and 1.8% were based on patent applications filed with SIPO, EPO and UKPO respectively. Among the 5 353 standard patents granted in Hong Kong in the same year, 65.4%, 32.2% and 2.4% were based on patents granted by SIPO, EPO and UKPO respectively. Annex 1 gives the relevant statistics.

² PSC Report, paragraph 4.41.

Under Articles 4A(1) and 4C(1) of the Paris Convention for the Protection of Industrial Property, any person who has duly filed an application for a patent, or for the registration of a utility model, in one of the countries to which the Paris Convention applies, or his successor in title, shall enjoy, for the purpose of filing in the other countries, a right of priority for a period of twelve months.

⁴ PSC Report, paragraphs 1.29-1.32.

- An application for a standard patent is made in two stages: a request to record (filed within 6 months after the date of the publication of the corresponding patent application in a designated patent office); and subsequently a request for registration and grant (filed within 6 months after the date of grant of the patent by the designated patent office or publication of the request to record in Hong Kong, whichever is later).
- 1.10 The Hong Kong Patents Registry (the Registry) conducts a "formality examination" of applications for a standard patent by verifying the documents and information submitted (including a copy of the specification of the patent as published by the designated patent office). The Registry does not conduct "substantive examination", i.e. it does not assess whether the invention is novel⁵, involves an inventive step⁶ and is susceptible of industrial application⁷.
- 1.11 The normal processing time for each of the two stages described in paragraph 1.9 above is about three months. The Registry currently charges a fee of \$896 for registering a standard patent in Hong Kong.

Strengths of the current "re-registration" regime

Patent rights are territorial in nature. A person who wants to exploit an invention in markets outside Hong Kong has to secure the grant of patent in each of the jurisdictions involved. Many applicants for the grant of a standard patent in Hong Kong also seek patent protection in other economies, including our major trading partners such as Europe and Mainland China. If they have already applied for a patent in one of the designated patent offices, the time and costs for them to get a standard patent in Hong Kong are fairly insignificant.

An invention shall be considered as novel if it does not form part of the state of the art.

An invention shall be considered as involving an inventive step if, having regard to the state of the art, it is not obvious to a person skilled in the art.

An invention shall be considered as susceptible of industrial application if it can be made or used in any kind of industry, including agriculture.

- 1.13 Besides, since all three designated patent offices conduct in-house substantive examination of patent applications, grantees of a standard patent in Hong Kong have a good measure of assurance⁸ about the validity of their patents, at a fraction of the costs that they would otherwise have to incur for having the inventions examined a second time.
- 1.14 Many practitioners in the patent field thus consider our current standard patent system user-friendly and cost-effective.

Weaknesses of the current "re-registration" regime

- Under the current "re-registration" system, an applicant who wants to seek patent protection in Hong Kong alone could not apply for a standard patent in Hong Kong direct. He has to first file an application with one of the designated patent offices.
- 1.16 Individual local applicants may find this requirement inconvenient.
- 1.17 Since the substantive examination is done by the designated patent office, it may be argued that the existing system does not encourage the development of patent agency business in Hong Kong or the development of home-grown expertise necessary for drafting and prosecuting applications for patents. There would also be less work opportunities for local graduates with science and technical background.

Calls for change

1.18 Recently, there are growing calls for Hong Kong to have its own independent OGP system which allows an inventor to apply for a standard patent direct in Hong Kong.

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This refers to the fact that there could be no total assurance of validity even for patents granted after substantive examination, as such patents may still be the subject of revocation proceedings on the ground that the invention is not a patentable invention.

- 1.19 There are also calls for a critical review of the current arrangements including how well the patent system is complementing efforts being made to develop Hong Kong into a regional innovation and technology hub.
- 1.20 Some consider that the current "re-registration" system should be maintained even if an OGP system is to be introduced in Hong Kong. In their view, the dual system will give users the added choice of applying for a standard patent in Hong Kong direct or through "re-registration" depending on their market and operation needs.
- 1.21 Others reckon that an OGP system may not be cost-effective. They consider that the current "re-registration" system should be maintained, with some fine-tuning where appropriate. They find the current system simple, convenient and cost-effective in meeting the general needs of Hong Kong.

OGP System

In contrast with a "re-registration" system, an OGP system allows application for patent protection to be filed direct with the patent office at home without first applying for a patent in another patent office. Whether substantive examination is to be conducted locally or elsewhere before a patent is granted would be a matter of choice for the approving authority.

Experience in other jurisdictions

1.23 A brief description of the OGP system in selected jurisdictions is set out below⁹.

The write-up that we set out in various parts of this paper is based on information found on various websites or publications, including but not limited to the official websites of the relevant patent offices.

OGP system with in-house substantive examination

1.24 It is common for the patent office of technologically advanced countries with a substantial volume of filings to conduct its own substantive examination before grant. Such an in-house examination system requires significant investment in a team of suitably qualified patent examiners (who have practical knowledge and experience in diversified and often highly developed fields of technology) and a comprehensive technical database.

European Patent Convention countries

- 1.25 The European Patent Convention (EPC) provides for the grant of European patents by EPO for the contracting States¹⁰ to the EPC through a single application procedure. An applicant for a European patent may decide in which contracting States protection for the invention is to be sought. In some contracting States, translation of the claims and/or specifications into the national language is required¹¹.
- 1.26 EPO is responsible for accepting applications, conducting substantive examination and granting patents. Only one kind of patent is granted under the EPC for inventions. Similar to our standard patent, the maximum term of protection of a European patent is 20 years. EPO is financially autonomous and meets all of its expenditures out of income, mainly consisting of fees paid by applicants and patentees.
- 1.27 In 2010, EPO received 150 961 applications for a patent. Over 4 000 staff members (including management staff, examiners, lawyers, administrators and linguists) work in the search, examination and opposition divisions of EPO. In 2010, EPO granted a total of 58 108 patents.

As at 10 March 2011, there were 38 member States. See http://www.epo.org/about-us/organisa tion/member-states.html.

See http://www.epo.org/applying/european/validation.html for details.

United States

- 1.28 There are three kinds of patents in the United States (US), namely utility patents, design patents and plant patents. A utility patent is also referred to as a "patent for inventions" and has a maximum term of protection for 20 years. A design patent in the US is the form of protection available to a new, original and ornamental design for an article of manufacture, which is similar to the protection afforded to a registered design in Hong Kong. A plant patent in the US gives protection to any distinct and new variety of plant that has been invented or discovered and asexually reproduced.
- The United States Patent and Trademark Office (USPTO) is responsible for accepting applications, conducting substantive examination and granting patents. Being financially autonomous, USPTO meets all of its expenditures out of income including fees paid for the registration and maintenance of patents.
- 1.30 In 2010, USPTO received 490 226 applications for a utility patent and had 6 225 patent examiners. A total of 207 915 utility patents were granted in the US in 2010.

OGP system with outsourcing arrangement

1.31 Instead of conducting substantive examination in-house, an OGP office may grant its own patent after substantive examination is carried out by an authority to which the task of substantive examination has been outsourced. Such a route is adopted by both Singapore and the Macao Special Administrative Region (Macao) when they started to adopt an OGP system.

Singapore

Before the current OGP system was established in 1995, the Singaporean patent regime used to be a "re-registration" system, based as it was on patents granted by EPO (for patents designating the UK) or UKPO.

1.33 Under its current OGP system, Singapore grants one kind of patent for inventions. The maximum term of protection is 20 years. Applicants file their applications direct with the Singapore Intellectual Property Office (IPOS). There are however different routes for search and examination (two distinct steps in the process). An applicant may file a patent application with a request for both search and examination to be done by one of the outsourced examination authorities (hereinafter referred to as the "local route" application). Alternatively, an applicant may rely on the search report issued by other patent offices and request examination to be done by one of the outsourced examination authorities (the "mixed route" application)¹². A third route is for an applicant to request IPOS to proceed to grant by relying on the search and examination reports issued by other patent offices (the "foreign route" application) ¹³. The benefits offered by the foreign route to the applicants (in terms of time and costs saved) may be comparable to those offered by the "re-registration" system¹⁴.

1.34 Different fees are payable under the different routes ¹⁵. Applicants using the mixed and foreign routes may save some time and costs in prosecuting the applications for patents in Singapore if they have already obtained from another patent office a search and/or examination report. The fees payable to IPOS for making an application under the

Under the mixed route, an applicant relies on the search results of the corresponding application or corresponding international application, and files a request for an examination report. The examination will be done by one of the outsourced examination authorities. A corresponding application and a corresponding international application refer respectively to an application for a patent filed with any patent office prescribed under the Singapore Patent Rules and one filed under the Patent Co-operation Treaty (PCT) in respect of the same or substantially the same invention as the application in question. The prescribed patent offices are listed in paragraph 1.50.

Under the foreign route, an application may proceed to grant by relying on the search and examination reports issued by a patent office prescribed under the Singapore Patents Rules (see paragraph 1.50) and the application is filed direct with IPOS. Alternatively, the applicant may, in the case of a PCT application entering the national phase in Singapore, rely on the search and examination reports issued by the PCT international search or examination authorities. A separate note on how the PCT operates is at **Annex 2**.

IPOS operates a self-assessment system, which means that it does not make the decision whether to grant a patent but leaves it to the applicants to decide whether to proceed to grant, based on the search and examination reports obtained through the various routes.

For details of fees payable under the various stages of the different routes, please refer to the website of IPOS at http://www.ipos.gov.sg/topNav/form/Patent+Forms+and+Fees.htm.

local route (with one search and one examination report issued by IPOS), the mixed route (with one examination report issued by IPOS) and the foreign route (without any search or examination report issued by IPOS) are currently about S\$2,930, S\$1,430 and S\$330 respectively¹⁶.

Since the OGP system was first established in 1995, IPOS has been outsourcing the substantive examination of patent applications to other examination authorities. Currently, there are three such authorities, namely, the patent offices of Austria, Denmark and Hungary. In 2010, IPOS received 9 773 applications for a patent. It granted 4 442 patents in the same year.

Macao

- 1.36 Prior to the introduction of the current OGP system in 2000, patents granted in Portugal could be extended to Macao. The term of protection was tied to the expiry date of the Portuguese patent.
- Under the present system, two types of patents may be granted in Macao, namely an invention patent and a utility patent. They are similar to a standard patent and a short-term patent respectively in Hong Kong. An applicant who has filed an application for an invention patent in SIPO or the grantee of an invention patent granted by SIPO may submit a request in Macao to extend the patent right to Macao. Alternatively, an applicant may file a new application for an invention patent direct with the Intellectual Property Department of the Macao Economic Services (Macao IPD).
- 1.38 Since Macao first established its own OGP system in 2000, the substantive examination of patent applications has been entrusted solely to SIPO. For applicants who file their applications for an invention patent direct with Macao IPD, their applications will, upon their

In IPOS' paper "Consultation paper on the proposed changes to the patent system 2009" (see http://www.ipos.gov.sg/NR/rdonlyres/AF1E69A6-6867-4558-984F-F9CA70522C4D/8121/LetterA nnexA.pdf), it is noted that among the Singapore patent applications which proceeded to grant in 2008, the proportion of applicants choosing the local, mixed and foreign routes is approximately 26%, 25% and 49% respectively.

request¹⁷, be forwarded to SIPO for substantive examination. SIPO will issue an examination report, on the basis of which Macao IPD will make a decision on the grant of patent or otherwise.

1.39 The fee for extending an invention patent to Macao or for filing a new application for an invention patent is the same, currently at MOP 800. The fee for substantive examination is MOP 2,500. In 2010, there were 62 new applications for an invention patent, 105 requests for substantive examination, and 150 applications for extension of invention patent granted by SIPO. In the same year, Macao IPD granted 156 invention patents and approved 170 extensions of invention patent.

The Case for an OGP System in Hong Kong

- 1.40 In considering whether an OGP system should be introduced in Hong Kong, we need to take into account the following factors-
 - (a) whether it is cost effective to establish an OGP system;
 - (b) whether an OGP system will facilitate patent users; and
 - (c) whether an OGP system would help encourage local investment in innovation.

Merits of establishing an OGP system in Hong Kong

1.41 The system would allow inventors who do not need a patent elsewhere to apply direct in Hong Kong. This may provide convenience and help save costs for inventors who wish to apply for a patent in Hong Kong alone. It complements the efforts being made to encourage more entrepreneurs to use Hong Kong as a launching pad for their research and development businesses. That may in turn help fortify the further development of Hong Kong as a regional innovation and technology hub.

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Applicants filing an OGP application with Macao IPD may request for substantive examination at any time within seven years from the date of application.

To the extent that more patent applications are filed in Hong Kong direct, it may stimulate the growth of patent agency business in Hong Kong, help build up local expertise in drafting and prosecuting applications for patent, and offer added career opportunities for graduates with science and technical background.

Drawbacks of establishing an OGP system in Hong Kong

- 1.43 An OGP system may not facilitate those users who intend to register in other patent offices and then apply for a Hong Kong patent through "re-registration". A possible solution is to maintain the "re-registration" system in parallel with the OGP system. However, operating a parallel system would entail extra cost in maintenance, which will have to be passed onto the users¹⁸.
- 1.44 an OGP system with in-house substantive Besides, examination will require the patent office to maintain a large team of examiners. Annex 3 sets out the number of applications filed and the number of examiners in major patent offices with in-house substantive The number of examiners retained by each office ranges examination. from 675 to over 6 000. The patent office also needs to develop and maintain a comprehensive technical database for assessing whether an invention is novel and whether it involves an inventive step. subject matter of an application for a standard patent may relate to any particular technical area and hence the technical database of the examination authority has to have the most up-to-date information about developments in the full range of scientific and technological fields. Hence, for a market similar to the size of Hong Kong, an OGP system with full fledged in-house examination capacity may not be viable or cost-effective, as it is likely to result in very high registration fees.

be charged under any OGP system to be introduced.

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The fees charged by the Hong Kong Patents Registry under the Ordinance are set at a level that provide for the recovery of expenditure incurred in the provision of the relevant services (section 149(6) of the Ordinance). The same principle of full cost recovery would equally apply to fees to

Considerations

- (1) The case for outsourcing substantive examination if an OGP system is to be adopted
- 1.45 Two possible routes exist for pursuing an OGP system -
 - (a) in-house substantive examination as per the case of EPO and USPTO; and
 - (b) outsource the substantive examination to other authorities as per the case of Singapore and Macao.
- As is perhaps evident from the practice of other jurisdictions, one deciding factor appears to lie in whether the critical mass necessary for supporting a self-financing examination authority at home exists. Patents are territorial in nature i.e., a standard patent granted in Hong Kong would only offer protection to the invention in Hong Kong. For an economy like Hong Kong where the size of the local market is a relatively small part of the global market, going straight to route (a) in paragraph 1.45 above is probably out of the question, as it may well result in disproportionately high registration fees up-front.
- 1.47 A more viable alternative for Hong Kong in the short to medium term is route (b). Under such an arrangement, the Hong Kong Patents Registry will do a formality check before sending the application to another patent office for substantive examination. The Registry will consider the examination report prepared by the outsourced examination authority and then decide whether to grant the patent or not. This may require some technical expertise and experience on the part of the examiners, though the demand should be a lot less when compared with having in-house substantive examination. Depending on the demand for obtaining patents through this route and the fees charged by the outsourced examination authorities, the costs to be incurred by an applicant might not be lower than an application through the

"re-registration" route¹⁹.

1.48 If an OGP system with outsourced substantive examination is adopted, we may in the longer run explore the possibility of engaging home-grown expertise and developing a technical database for the substantive examination of patent applications that fall within selected technological niches where Hong Kong is regarded as a centre of excellence.

(2) The case for refining the "re-registration" system

- 1.49 There are three designated patent offices under the existing standard patent system. SIPO is a natural choice. To maintain continuity after 1997, UKPO and EPO (for patents designating the UK) are kept as designated patent offices. Regardless of whether we are going to adopt an OGP system, there may be merits for keeping a "re-registration" system as part of our regime. Under this scenario, one obvious question that comes to mind is whether there should be any change to the list of designated patent offices, having regard to the growing prominence of globalization.
- 1.50 We note that Singapore accepts, in its patent examination process, the search and examination reports issued by a number of different overseas jurisdictions. Under the foreign route, the grant of a patent in Singapore may be based on a search and examination report from a prescribed patent office. The list of prescribed patent offices include those of Australia, Canada (in respect of applications for a Canadian patent filed in English), Japan, New Zealand, Republic of Korea, the UK and the US, as well as EPO (in respect of applications for a European patent filed in English).
- 1.51 However, if the number of designated patent offices is increased, differences in the patent laws of different countries, particularly in respect of patentability standards, the interpretation of

through different routes are set out in paragraphs 1.34 and 1.39 above.

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The costs incurred by an application through the "re-registration" route include the application fees for the patent in the designated patent office and the re-registration fees for the corresponding patent in Hong Kong. The fees respectively payable to IPOS and Macao IPD for patents sought

claims, as well as the ambit of protection could result in inconsistencies which may be hard to reconcile.

1.52 If other designated patent offices are to be included, we will need to consider carefully the criteria to be applied in the selection. Relevant factors to be considered may include (i) whether the jurisdiction has strong trade ties with Hong Kong and is itself a sufficiently big market; (ii) whether the patent office has a high number of applications from an international spread of applicants; (iii) whether the system (in terms of patentability standards, the interpretation of claims and the ambit of protection) is similar to the system in Hong Kong; (iv) whether the system uses the official languages of Hong Kong; and (v) whether the patents issued by the patent office in question are well respected internationally.

Possible Options

Option 1: Introduce an OGP system with substantive examination outsourced to other patent offices, in lieu of the current "re-registration" system

1.53 Under this option, applicants have to file their applications afresh in Hong Kong even if they have already registered their patents in other jurisdictions. We need to decide the list of patent office(s) which may act as our outsourced examination authority.

Option 2: Introduce an OGP system with substantive examination outsourced to other patent offices whilst retaining the current "re-registration" system (with possible expansion in the number of designated patent offices)

1.54 Under this option, the current "re-registration" system will be retained alongside the OGP system, with modifications where appropriate. The expansion in the number of designated patent offices, if any, would need to be carefully considered having regard to factors such as those set out in paragraphs 1.49 to 1.52.

Option 3: Do not introduce an OGP system, but maintain the current "re-registration" system with possible expansion in the number of designated patent offices

1.55 The current "re-registration" system will be maintained. As in Option 2 above, consideration should be given to whether modifications would be appropriate, such as the possible expansion in the number of designated patent offices.

Summary of Views Sought

- 1.56 Your views are sought on the following issues -
 - (a) What benefits will an OGP system bring to Hong Kong? Will an OGP system promote local innovation and enhance patent quality?
 - (b) Will there be sufficient demand to support an OGP system in Hong Kong? Will it be a cost-effective system?
 - (c) Should we introduce an OGP system in Hong Kong with substantive examination outsourced to other patent office(s), and, if so, which office(s) and why?
 - (d) Irrespective of the answers to (c) above, should the current "re-registration" system be maintained, and, if so, should the system be modified as appropriate, including expansion to recognize the patents granted by other jurisdiction(s), and, if so, which jurisdiction(s)?

Chapter 2

Short-Term Patents

Procedures for Obtaining a Short-Term Patent in Hong Kong

- 2.1 The short-term patent system in Hong Kong is intended to supplement the standard patent system by offering protection to inventions with a shorter commercial life.
- An application for a short-term patent is made by filing a request for grant in Hong Kong direct without having to go through a designated patent office first. However, no substantive examination on an invention's patentability is conducted prior to grant. In Hong Kong, short-term patents cover the same range of inventions that may be protected by standard patents. Further, the patentability requirements (i.e. whether an invention is novel, involves an inventive step and is susceptible of industrial application) for short-term patents are identical to those for standard patents.
- 2.3 The applicant for a short-term patent is required to file a search report from an international searching authority or one of the three designated patent offices. The report contains the findings of a search undertaken by the search authority on the existence or otherwise of prior art in relation to the invention. A short-term patent is granted after the Hong Kong Patents Registry is satisfied that the documents and information required are fully furnished. The process could usually be completed within three months.
- 2.4 Although not a requirement under any international conventions, systems for lesser patents²⁰ similar to the short-term patents in Hong Kong exist in many other jurisdictions.

The expression "lesser patent" is generally used to refer to patents with a lower level of protection than standard patents.

- 2.5 The specification of each application for a short-term patent in Hong Kong is limited to one independent claim. The maximum term of protection is eight years. The current filing and advertisement fees are \$755 and \$68 respectively. **Annex 4** shows the number of applications filed and the number of short-term patents granted in recent years.
- Having regard to the fact that a short-term patent is not subject to substantive examination before grant, there are built-in safeguards under the Ordinance to prevent abuse of the rights granted to a short-term patent. These include the onus placed on the owner to prove the validity of his short-term patent in enforcement proceedings in court (section 129 of the Ordinance); remedy against groundless threats of infringement proceedings (section 89); and the option for any person to initiate proceedings in the court to revoke a granted short-term patent on the ground that the invention is not patentable (section 91).

Strengths of the short-term patent system

- 2.7 The current short-term patent system has been commended in some quarters for offering a fast and inexpensive means of protecting simple inventions with a limited commercial life span in the market. Since the grant of a short-term patent is based only on formality examination, the granting process is fast and the costs can be kept low.
- 2.8 Compared to the lesser patent systems in some other jurisdictions, the short-term patent system in Hong Kong covers a relatively wider range of inventions²¹. This is also a feature welcomed by users.

For example, in Mainland China, utility models are protected under its lesser patent system which only covers new technical solutions proposed for the shape and structure of a product, or the combination thereof, that are fit for practical use.

Weaknesses of the short-term patent system

2.9 Since the patentability of the invention is not subject to substantive examination before a short-term patent is granted, there is potentially more room for abuse. Some of the short-term patents granted may turn out to be invalid and unenforceable. For as long as these short-term patents remain on the register, third parties in Hong Kong may be deterred from employing the technology covered by the inventions.

Positions in Other Jurisdictions

- 2.10 We have examined the patent systems in some other jurisdictions. Whilst Canada, the UK and the US do not have a lesser patent system, regimes similar to the short-term patent system in Hong Kong are found in jurisdictions including Australia, Mainland China, Denmark, Germany and Japan. <u>Annex 5</u> gives further information about the systems in these jurisdictions (where the lesser patents are variously termed as innovation patents, petty patents, utility models, etc.).
- None of these lesser patent systems mandatorily requires substantive examination of patentability before grant. Only formality examination (as in Hong Kong) is required. That said, different measures may be found in these lesser patent systems to guard against abuse. For example, the patent authority may be empowered to conduct search or substantive examination, either before or after the grant of a lesser patent, upon request by an applicant for the grant of a patent, a patent owner or a third party²². In certain jurisdictions²³, substantive examination may be required before an infringement action involving a lesser patent can be initiated in court.

As in the case of Germany.

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For example, Australia and Japan.

- 2.12 Similar to the position in Hong Kong, the patentability requirements in Denmark and Mainland China for standard patents and lesser patents are largely the same. In short, an invention is patentable if it is susceptible of industrial application, is new and involves an inventive step. On the other hand, jurisdictions including Australia, Germany and Japan have adopted a more relaxed standard for lesser patents.
- 2.13 Regarding the maximum term of protection available to lesser patents, Australia protects innovation patents for a term of eight years whilst Mainland China, Denmark, Germany and Japan offer protection of up to 10 years for lesser patents.
- 2.14 In Australia, the number of independent claims in an application for a lesser patent is capped at five. Mainland China, Denmark, Germany and Japan do not seem to have imposed a limit on the number of independent claims in an application for a lesser patent.

Refining the Short-Term Patent System

- 2.15 When determining whether the current short-term patent system should be refined in any way, the following factors may be relevant -
 - (a) whether the current short-term patent system is user friendly to the industry, provides flexibility and encourages innovation;
 - (b) whether the maximum term of protection under the current short-term patent system is appropriate;
 - (c) whether the refinement(s) under contemplation could help minimize legal uncertainty without undermining the cost-effectiveness of the system; and
 - (d) whether the refinement(s) under contemplation would help maintain an appropriate balance between the interests of the patent owners and the interests of other users of the patent system.

Possible changes

- 2.16 Some possible changes to the current system are set out below to facilitate public discussions.
- (1) Substantive examination of short-term patents
- 2.17 Introducing a mechanism for substantive examination of short-term patents would provide greater certainty about their validity. This may help deter abuse of the system, avoid excessive litigation and reduce the number of applications for registration of inventions that do not meet the patentability requirements.
- Nonetheless, we note that the number of short-term patents revoked on the ground that the invention is not a patentable invention has been small ²⁴. Introducing substantive examination for short-term patents may lead to higher costs and longer processing time, thereby reducing the attractiveness of the short-term patent system as an alternative to standard patents, for protecting inventions with a shorter commercial life.
- 2.19 In assessing whether substantive examination should be introduced (and if so, how), we need to take into consideration factors including the following -
 - (a) timing whether substantive examination should be carried out before or after the short-term patent is granted. If it is to be carried out after grant, at what point of time should it be carried out;

Up to July 2011, five short-term patents have been revoked under section 91(a) of the Ordinance on the ground that the invention is not a patentable invention.

- (b) mandatory or optional whether substantive examination should be made a mandatory requirement or optional, for example, whether it should be a condition for commencement of infringement proceedings²⁵;
- (c) who may request for substantive examination if substantive examination is optional, whether the patent owner or a third party or both should be able to request for substantive examination²⁶; and
- (d) who should pay for the costs of the substantive examination if substantive examination may be requested by a third party, whether the costs should be borne by the patent owner, the third party, or split between them.
- 2.20 The above issues are inter-related. It may not be advisable to consider each issue separately in isolation from the others.

(2) Extend the maximum term of protection

2.21 Under this option, the owner of a short-term patent will be allowed to enjoy exclusive rights to his invention for a longer period of time. The extended term of protection would give the patent owner extra time to market and realize commercial gain from the invention.

Experience in other jurisdictions shows that a requirement for substantive examination to be carried out before commencement of infringement proceedings is not uncommon. This may be compared with the current position in Hong Kong where the owner of a short-term patent may, in the absence of evidence to the contrary, prove the validity of the patent by establishing a prima facie case only. This may be attainable without having the patentability of the invention established by an examination authority.

In Australia, where patent holders may request substantive examination at any time after the grant of the innovation patent, only 22% of granted innovation patents have examination requested. See *Review of the Innovation Patent – Final Report* (July 2006) of IP Australia at http://www.ipaustralia.gov.au/media/resources/ReviewInnoPatentFinalReport.pdf.

2.22 This option has the downside of prolonging the period of time during which members of the public cannot freely use the patented invention for commercial purposes without the consent of the patent owner.

(3) Relax the number of independent claims

- 2.23 This option gives patent applicants more flexibility by lifting the restriction on the number of claims that may be included in a short-term patent application. Applications with multiple claims, if allowed, may lower the total costs incurred in applying for short-term patents.
- 2.24 On the other hand, since short-term patents are intended to protect relatively simple inventions, allowing a large number of claims will be contrary to the objective of having a straightforward application process for short-term patents. Allowing multiple claims in a single application may also aggravate the potential room for abuse as the lower application costs may give added incentive to people with inventions not meeting the patentability requirements to apply.

(4) Lower the patentability criteria

2.25 This option enlarges the pool of inventions that may benefit from protection under the short-term patent system. This may give small and medium-sized enterprises in Hong Kong an added incentive to invest in research and development²⁷. As regards what alternative threshold of inventiveness should be adopted, we may consider pitching it on par with that used in say Australia (see **Annex 5**).

In Australia, although no conclusive correlation with the lowering of the inventiveness threshold could be drawn, the number of applications for innovation patents were almost double those received for petty patents under the old system. See *Review of the Innovation Patent – Final Report* (July 2006) of IP Australia at http://www.ipaustralia.gov.au/media/resources/ReviewInno PatentFinal Report.pdf.

However, lowering the patentability criteria may give patent owners exclusive rights to ideas which do not qualify for protection under the existing patent system, and debar others from commercially exploiting such ideas without consent from the patent owners.

Possible Options

Option 1: Maintain the status quo

2.27 The current short-term patent system provides owners of inventions with a right that is quick and affordable to obtain. It is for consideration whether there are merits in maintaining the status quo.

Option 2: Refine the short-term patent system

2.28 The current system may be maintained with modifications where appropriate, taking into account the views and suggestions made by relevant stakeholders. Four different possible measures for refining the short-term patent system have been discussed in paragraphs 2.17 to 2.26 above. Other suggestions are welcome.

Option 3: Discontinue the short-term patent system

- As pointed out in paragraphs 2.4 and 2.10 above, lesser patent systems are not an international norm. Noting the inherent problems the short-term patent system may have (as expounded in paragraph 2.9 above), it is for consideration whether the system should be discarded.
- 2.30 However, if the short-term patent system is removed, Hong Kong will have to rely solely on the standard patent system which involves a longer and more costly application process. This could act as a disincentive to research and development that may lead to inventions with a shorter commercial life span.

Summary of Views Sought

- 2.31 Your views are sought on the following issues -
 - (a) What benefits does the short-term patent system bring to Hong Kong? Does it promote local innovations?
 - (b) Should we retain the current short-term patent system in its existing form, or should we introduce changes to the system? If the latter, what sort of changes should be introduced?
 - (i) Should we introduce substantive examination? when should it be carried out? Should it be a mandatory requirement or optional? Should it be a condition for commencement of infringement proceedings? Should the question of whether a substantive examination be carried out be left to the choice of the patent owner or a third party, and who should bear the costs?
 - (ii) Should we extend the current term of protection? If so, how long should the term of protection be?
 - (iii) Should we relax the present restriction on the number of claims that may be included in each patent application? If so, how many claims should be allowed in each patent application or should there be no restriction at all?
 - (iv) Should we lower the threshold for patentability for short-term patents? If so, what alternative threshold should be applied?
 - (v) What other changes are required?
 - (c) Should we discontinue the short-term patent system altogether?

Chapter 3

Regulation of Patent Agency Services in Hong Kong

3.1 The question of whether we should go down the path of having an OGP system would, to a large extent, determine the kind of patent agency services required locally. Nevertheless, we would like to gauge your views on the case for regulating patent agents in Hong Kong.

An Overview of Current Position in Hong Kong

- 3.2 A patent agent or a patent attorney is a person who represents another in the prosecution of applications for patents, maintenance of patents granted and other related matters. His scope of work includes providing advice on the patentability of inventions, drafting the claims and specifications for patent applications and responding to objections raised by the patent offices in respect of the patent applications.
- 3.3 The claims and specifications of an invention define the scope of protection afforded by a patent. The drafting of such claims and specifications requires specialised technical skills and knowledge. If the description is too broad, the invention may fall within the current state of the art and be considered as lacking in novelty; while too narrow a description could mean insufficient protection in the event of an infringement claim. Very careful consideration by a person trained in the relevant field of technology is hence essential to ensure that the right balance is struck.
- 3.4 Under the Ordinance, for patent applications or proceedings before the Hong Kong Patents Registry, the Registrar of Patents shall refuse to recognize as an agent a person who neither resides nor has a place of business in Hong Kong²⁸. In addition, the Registrar may refuse to recognize the capacity of a person to act as an agent in respect of

Section 140(4) of the Ordinance.

business under the Ordinance in certain circumstances²⁹, for example, where the person has been convicted of a criminal offence. Apart from the above, there is no other statutory requirement that has to be complied with in the provision of patent agency service. Any person may practise or act as a patent agent for others, although many patent agents who are in active practice in Hong Kong are in fact qualified patent practitioners in other jurisdictions, such as the UK, Europe, Mainland China, Australia, New Zealand and the US.

Strengths of the present system

Without a regulatory regime, there is greater flexibility to users of the system. Any person may act as a patent agent in proceedings before the Registrar³⁰. Clients have a free choice in hiring an agent, depending on the qualification, experience and reputation etc. of and the fees charged by the service providers. The fact that the provision of patent agency services is not regulated is seen by some to promote competition amongst service providers, with the fees for such services being kept low.

Weaknesses of the present system

3.6 With an unregulated profession, there is less assurance of the quality of the services, and any person, with or without the relevant technical and legal skills, may claim to be a patent practitioner. Some people may not know where to seek the appropriate services they require.

Other comments on the present system

3.7 There are suggestions that a regulatory regime will help build a local patent profession and create more job opportunities for local graduates with science, engineering or other technical background, especially if an OGP system is to be introduced in Hong Kong.

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²⁹ Section 85(7) of the Patents (General) Rules.

Under the current standard patent and short-term patent systems, the Hong Kong Patents Registry conducts formality examination only, as opposed to substantive examination. Hence, proceedings before the Registrar involve mainly procedural issues.

Positions in Other Jurisdictions

- 3.8 We have examined the position in some jurisdictions. In places with an OGP system, the patent agency profession is usually regulated under a statutory regime³¹. **Annex 6** summarises the regime in several jurisdictions. They all operate an OGP system.
- 3.9 Some countries, such as the UK, adopt a liberal system in that there are no qualification requirements for agents who act for others in patent applications or related proceedings. However, the use of titles such as "patent agents" or "patent attorneys" are restricted to those professionals who satisfy certain prescribed requirements and are registered under the relevant regulations.
- 3.10 Some jurisdictions (including those in Australia, Mainland China, the EPC regime, New Zealand, Singapore and the US) adopt a strictly regulated system by limiting the provision of patent agency services to those professionals who have satisfied certain prescribed requirements and are registered under the relevant regulations.
- In some jurisdictions, such as the US, the titles "registered patent attorneys" and "registered patent agents" refer to two types of professionals with different qualifications. They differ in particular in the extent to which they may represent clients in court and registry proceedings.
- 3.12 Not all jurisdictions with an OGP system have established a regulatory regime for patent agents. Macao falls under this category.

Timing-wise, the regulation of the provision of patent agency services does not necessarily tie in with the establishment of an OGP system. For example, Singapore only introduced a regulatory regime seven years after it started to have an OGP system.

The Case for Regulating Providers of Patent Agency Services in Hong Kong

- 3.13 In determining whether to establish a regulatory regime for providers of patent agency services in Hong Kong, a balance has to be struck between the costs of regulating the profession and the benefits to the users of the services, including benefits in terms of the access to and the quality of such services.
- 3.14 Moreover, it would be necessary to consider the demand for patent agent services in Hong Kong, and how that would be affected by possible future developments in the standard patent and short-term patent systems. In the event that an OGP system is to be introduced in Hong Kong, the case for a regulatory regime would become stronger as under such a system, patent practitioners will more likely be required to deal with substantive and technical issues in proceedings before the Registrar.
- 3.15 Other relevant considerations include the quality assurance offered by a regulated system, the possible impact on the costs required for obtaining patent protection in Hong Kong if the engagement of registered patent practitioners is to be made mandatory, and the costs involved in setting up a regulatory regime for providers of patent agency services.

Possible Options

Option 1: Maintain the status quo

Option 2: Establish a regulatory regime for providers of patent agency services

3.16 We welcome views on whether and if so how a regulatory regime for providers of patent agency services should be established in Hong Kong.

Summary of Views Sought

- 3.17 Your views are sought on the following issues -
 - (a) Should Hong Kong have a regulatory regime for professionals providing patent agency services? Should the promulgation of a regulatory regime or otherwise be made dependent on whether an OGP system is to be implemented in Hong Kong?
 - (b) If a regulatory regime is to be introduced for providers of patent agency services,
 - (1) should we restrict the provision of such services to persons meeting certain qualifications or requirements only? Or should we limit the use of particular titles only but allow the provision of such services by any person?
 - (2) should the regulation apply to all types of patent agency services or only to certain services e.g. the drafting and amendment of patent specifications under an OGP system?

Chapter 4

We Seek Your Views

Summary of Issues

4.1 The Government would like to hear your views on issues related to the future development of the standard patent system, the short-term patent system and the regulation of patent agency services in Hong Kong as outlined in this consultation paper. In summary, we would like to invite views on the issues set out below.

Standard Patent System (Chapter 1)

- (a) What benefits will an OGP system bring to Hong Kong? Will an OGP system promote local innovation and enhance patent quality?
- (b) Will there be sufficient demand to support an OGP system in Hong Kong? Will it be a cost-effective system?
- (c) Should we introduce an OGP system in Hong Kong with substantive examination outsourced to other patent office(s), and, if so, which office(s) and why?
- (d) Irrespective of the answers to (c) above, should the current "re-registration" system be maintained, and, if so, should the system be modified as appropriate, including expansion to recognize the patents granted by other jurisdiction(s), and, if so, which jurisdiction(s)?

Short-Term Patent System (Chapter 2)

- (e) What benefits does the short-term patent system bring to Hong Kong? Does it promote local innovations?
- (f) Should we retain the current short-term patent system in its existing form, or should we introduce changes to the system? If the latter, what sort of changes should be introduced?
 - (1) Should we introduce substantive examination? If so, when should it be carried out? Should it be a mandatory requirement or optional? Should it be a condition for commencement of infringement proceedings? Should the question of whether a substantive examination be carried out be left to the choice of the patent owner or a third party, and who should bear the costs?
 - (2) Should we extend the current term of protection? If so, how long should the term of protection be?
 - (3) Should we relax the present restriction on the number of claims that may be included in each patent application? If so, how many claims should be allowed in each patent application or should there be no restriction at all?
 - (4) Should we lower the threshold for patentability for short-term patents? If so, what alternative threshold should be applied?
 - (5) What other changes are required?
- (g) Should we discontinue the short-term patent system altogether?

Regulation of Patent Agency Services in Hong Kong (Chapter 3)

- (h) Should Hong Kong have a regulatory regime for professionals providing patent agency services? Should the promulgation of a regulatory regime or otherwise be made dependent on whether an OGP system is to be implemented in Hong Kong?
- (i) If a regulatory regime is to be introduced for providers of patent agency services,
 - (1) should we restrict the provision of such services to persons meeting certain qualifications or requirements only? Or should we limit the use of particular titles only but allow the provision of such services by any person?
 - (2) should the regulation apply to all types of patent agency services or only to certain services e.g. the drafting and amendment of patent specifications under an OGP system?

Other Suggestions

(j) How else should we position our system for the purposes of encouraging local innovation and attracting investors to use Hong Kong as a launching pad for their research and development operations?

How to Respond

4.2 You are invited to provide your views on the issues set out in this consultation paper on or before 31 December 2011 through the post, email or fax -

Mail: Division 3

Commerce, Industry and Tourism Branch

Commerce and Economic Development Bureau

23rd Floor, West Wing

Central Government Offices

2 Tim Mei Avenue

Tamar, Hong Kong

Email: patent review@citb.gov.hk

Fax : 2147 3065

- 4.3 You may decide whether or not to supply your personal data when providing views on this consultation paper. Any personal data provided with a submission will only be used for the purpose of this public consultation exercise.
- The submissions and personal data collected may be passed to relevant Government bureaux and departments for purposes directly related to this consultation exercise. The Government bureaux and departments receiving any personal data are bound by the purposes in their subsequent use of such data.
- 4.5 This Bureau may publish the submissions made in response to this consultation paper for public viewing after the conclusion of the public consultation exercise, and may publish your name or your affiliation (or both). If you do not wish to disclose your identity when we publish the public views received, please state so when making your submission.

- Any sender providing personal data in the submission will have the rights of access and correction with respect to such personal data. Any requests for data access or correction of personal data should be made in writing.
- 4.7 An electronic copy of this document is available at the following websites -

http://www.cedb.gov.hk/citb

http://www.ipd.gov.hk

Standard Patents: Number of Applications Filed and Granted in Hong Kong

(a) Standard Patents: Number of applications filed in Hong Kong, with breakdowns showing the share of cases based on applications filed with SIPO, EPO and UKPO respectively.

	2006 Number (Percentage)	2007 Number (Percentage)	2008 Number (Percentage)	2009 Number (Percentage)	2010 Number (Percentage)	2011 (as at 30.6.2011) Number (Percentage)
SIPO	7 204	7 583	7 559	6 808	6 663	3 509
	(52.2%)	(55.1%)	(55.3%)	(57.4%)	(56.9%)	(54.4%)
ЕРО	6 239	5 837	5 783	4 651	4 693	2 756
	(45.3%)	(42.4%)	(42.3%)	(39.2%)	(40.1%)	(42.7%)
UKPO	237	230	189	247	211	111
	(1.7%)	(1.7%)	(1.4%)	(2.1%)	(1.8%)	(1.7%)
Unclassified ¹	110	116	131	151	135	75
	(0.8%)	(0.8%)	(1%)	(1.3%)	(1.2%)	(1.2%)
Total no. of applications ²	13 790	13 766	13 662	11 857	11 702	6 451

(b) Number of standard patents granted in Hong Kong, with breakdowns showing the share of cases based on patents granted by SIPO, EPO and UKPO respectively.

	2006 Number (Percentage)	2007 Number (Percentage)	2008 Number (Percentage)	2009 Number (Percentage)	2010 Number (Percentage)	2011 (as at 30.6.2011) Number (Percentage)
SIPO	2 907	2 677	2 332	3 528	3 503	1 183
	(56.5%)	(55.3%)	(58.3%)	(62.7%)	(65.4%)	(61.6%)
ЕРО	1 988	1 953	1 589	1 975	1 721	664
	(38.6%)	(40.4%)	(39.7%)	(35.1%)	(32.2%)	(34.6%)
UKPO	252	209	80	122	129	73
	(4.9%)	(4.3%)	(2%)	(2.2%)	(2.4%)	(3.8%)
Total no. of grants	5 147	4 839	4 001	5 625	5 353	1 920

This refers to cases where the designated patent office is not specified on the application form initially submitted.

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The number of applications filed is usually larger than the number of patents ultimately granted. Some applications did not proceed to grant because applicants failed to obtain a patent from the designated patent office. In other cases, the applicants withdrew their applications.

Patent Co-operation Treaty

The Patent Co-operation Treaty (PCT) is an international patent registration system administered by the World Intellectual Property Organization (WIPO). Membership to PCT is confined to sovereign states. The Treaty enables the filing of one "international application" with a single patent office in one language and with a single set of forms (and fees) instead of filing numerous separate national and/or regional patent applications. Such an international application may be filed by anyone who is a national or resident of a PCT contracting state¹ with the national patent office of the relevant contracting state, or, at the applicant's option, with the International Bureau of WIPO in Geneva.

- 2. The PCT application procedure consists of two main phases, namely the "international phase" and the "national phase". During the "international phase", WIPO will centrally receive all applications. An international application has the effect, as of the international filing date, of a national application in all PCT contracting states that the applicant has not excluded from his application².
- 3. The international application is subject to an international search carried out by one of the major patent offices³. The relevant office would issue a search report. A preliminary and non-binding written opinion ⁴ on whether the invention appears to meet the patentability criteria is also issued. The applicant may further request for an optional international preliminary examination.

As at 31 August 2011, there are a total of 144 contracting parties, including the People's Republic of China. See http://www.wipo.int/treaties/en/registration/pct/.

The relevant rules allow an applicant to take out certain contracting states from the designated list, by filing a withdrawal notice.

They include the Patent Offices of Australia, Austria, Brazil, Canada, China, Finland, Japan, the Republic of Korea, the Russian Federation, Spain, Sweden, the USA, the European Patent Office and the Nordic Patent Institute.

The written opinion will identify, among other things, whether or not the claimed invention appears to be novel, involve an inventive step (be non-obvious) and be industrially applicable.

4. Once the case enters the "national phase", the International Bureau of WIPO will pass the forms to the national patent offices of the countries where patent protection is sought. At this juncture, the applicant has to pay to the relevant national (or regional) offices the required national (or regional) fees, furnish them with any translations that may be required and appoint a representative (patent agent) as necessary. The receiving office will independently assess the application concerned and grant or refuse the application based on the relevant national laws.

Number of Patent Filings and Patent Examiners in various Patent Offices¹

Country	No. of Patent Filings ²	No. of Patent Examiners
US Patent and Trademark Office ³	456 106	6 243
European Patent Office ⁴	134 557	4 197 ⁵
State Intellectual Property Office of the People's Republic of China ⁶	314 573	3 859
Japan Patent Office ⁷	348 596	1 692
Korea Intellectual Property Office ⁸	163 523	675
German Patent and Trade Mark Office ⁹	59 583	800

The figures set out in this table were statistics in **2009** extracted from the official websites or annual reports of the various patent offices. Data for 2010, where available, are set out in individual footnotes below.

Only patent applications having a scope of protection which corresponds with a standard patent in Hong Kong are included.

Data extracted from http://www.uspto.gov/web/offices/ac/ido/oeip/taf/us_stat.htm and http://www.uspto.gov/web/offices/com/annual/2009/mda_01.html. For 2010, 490 226 applications for utility patents (patents for inventions) were received and there were 6 225 patent examiners. See also http://www.uspto.gov/about/stratplan/ar/2010/mda_01.html.

Data extracted from http://www.epo.org/about-us/statistics/patent-applications.html. For 2010, 150 961 applications for patents were received.

The figure relates to management staff, examiners, lawyers, administrators and linguists working in the search, examination and opposition divisions. Data extracted from http://documents.epo.org/projects/babylon/eponet.nsf/0/EF4D634D22819B28C125770C005AB139/\$File/staff_analysis_place_of_employme nt_2009.pdf.

Data extracted from http://www.sipo.gov.cn/ghfzs/zltj/gnwszslnb/2009/201001/t20100121_488329.html and the report of "A brief introduction and review of the SIPO of PRC 01/2011". In 2010, the number of applications for invention patents received was 391 177 and there were 4 062 patent examiners. See also http://www.sipo.gov.cn/ghfzs/zltj/gnwszslnb/2010/201101/t20110110_562648.html.

Data extracted from http://www.jpo.go.jp/cgi/linke.cgi?url=/shiryou_e/toushin_e/kenkyukai_e/annual_report2010.htm (see pages 168 & 185). The 1 692 examiners included both patent and utility model examiners. For 2010, 344 598 applications for patents were received and there were 1 703 patent and utility model examiners. See also http://www.jpo.go.jp/cgi/linke.cgi?url=/shiryou_e/toushin_e/kenkyukai_e/annual_report2011.htm.

Data extracted from http://www.kipo.go.kr/upload/en/download/annualreport_2009_09.pdf. The 675 examiners included both patent and utility model examiners.

Data extracted from http://www.dpma.de/docs/service/veroeffentlichungen/jahresberichte_en/jb2009_en gl.pdf.

Annex 4

Short-Term Patents: Number of Applications Filed and Granted in Hong Kong

	2006	2007	2008	2009	2010	2011 (as at 30.6.2011)
Number of applications filed	520	599	488	551	614	306
Number of short-term patents granted	436	492	435	474	522	264

An Overview of the Lesser Patent Systems in Some Jurisdictions

Country	Title	Maximum	Patentability requirement	Limitation on	Examination & Enforcement
		term of protection		number of claims	
Australia	Innovation	8 years	- The invention must satisfy the	Up to 5 claims	- To obtain grant : formality examination only.
	patent		following conditions:		- The Commissioner of Patents may decide to examine
	(replacing		 is a manner of manufacture; 		the innovation patent, or the patent owner or a third
	petty .		 novel (absolute novelty² is 		party may specifically request an examination after
	patent on		required);		grant. If the innovation patent meets the
	24.5.2001)		• involves an <i>innovative</i> step ³ (a		patentability requirements, a certificate of validity
			lower inventive threshold as		will be issued to the patent owner. If the innovation
			compared to applications for		patent fails to meet the requirements, the innovation
			standard patents ⁴);		patent will be revoked by the patent office. An
			useful; and		appeal may be filed at the Federal Court against the
			 was not secretly used in the 		patent office's decision to revoke the innovation
			patent area prior to application		patent.
			date.		- At any time after an innovation patent has been
					certified:
					(1) the patent office may decide to re-examine the
					innovation patent, or the patent owner or a third
					party may request for re-examination. Only
					novelty and innovative step issues are
					considered during re-examination. If an
					adverse report is issued, and the patent owner

Under the previous system in Australia, the patentability requirements for standard patents and petty patents were largely the same.

Absolute novelty means that the invention is not publicly known anywhere in the world prior to the filing of the application for a lesser patent.

The requirement of an "innovative step" would be satisfied if the invention differs from what has been known in a way that is not merely superficial or peripheral to the invention. The variation must be of practical significance to the way the invention works, so as to make a substantial contribution to the working of the invention. There is no requirement that an invention claimed in an innovation patent must be non-obvious.

For an invention to be patentable as a standard patent, it must satisfy the following requirements: (1) is a manner of manufacture; (2) novel (absolute novelty required); (3) involves an inventive step (i.e. the invention is not obvious to someone with knowledge and experience in the technological field of the invention); (4) useful; and (5) was not secretly used in the patent area before application date.

Country	Title	Maximum term of	Patentability requirement	Limitation on number of	Examination & Enforcement
					fails to resolve all issues within the stipulated period of time, the innovation patent will be revoked. The patent owner may appeal to the Federal Court against the patent office's decision to revoke the innovation patent after re-examination; and (2) any person may oppose an innovation patent and seek the revocation of it (after it has been advertised as being certified) based on certain specified grounds. Either party may file an appeal to the Federal Court against any decision issued by the patent office. Infringement proceedings in respect of an innovation patent cannot be started unless it has been examined and certified.
Mainland	Utility Model Patent ⁵	10 years	 The utility model must satisfy the following conditions: novel (absolute novelty is required); creative; and of practical use; and Essentially the same patentability requirements as for invention patent applications. 	Unlimited – but subject to additional official fee for each claim in excess of the initial 10	- To obtain grant: formality examination only. - Examination on the patentability of the subject matter of a utility model will be conducted by the Patent Re-examination Board during the course of an invalidation proceeding. If it is found that the subject matter fails to meet the patentability requirements, the utility model will be invalidated. Appeal against the Patent Re-examination Board's decision may be filed at the People's Court. If an infringement dispute arises over a utility model patent, the People's Court or the administration department for patent-related work may require the patent owner or the complainant to present a patent right assessment report prepared by the patent administration department under the State Council. Such a report will serve as evidence in the infringement dispute.

In Mainland China, "utility models" refer to new technical solutions proposed for the shape and structure of a product, or the combination thereof, which are fit for practical use.

Country	Title	Maximum	Patentability requirement	Limitation on	Examination & Enforcement
		term of protection		number of claims	
Denmark	Utility Model	10 years	 A creation must satisfy the following requirements: new (absolute novelty is required); differs distinctly from the prior art; and susceptible of industrial application; and Essentially the same patentability requirements as for patent applications⁶. 	Appears to be unlimited	- To obtain grant: formality examination only. Prior to grant, an applicant may request an examination on novelty of the creation and whether it differs distinctly from the relevant prior art. If the patent office finds that the application does not comply with the above requirements, the applicant will be notified and be invited to file his observations or correct the application will be shelved if the applicant does not respond to the notice or take steps to correct the application. - Examination after grant may be requested by anyone, but the request may only be made based on certain grounds for revocation set out in Denmark's Consolidated Utility Models Act. If the patent office finds that there are obstacles to registration, the registration shall lapse. Where the registration could be maintained subject to certain amendments, the patent office may amend the registration upon obtaining the agreement of the proprietor of the utility model.
Germany ⁷	Gebrauchs -muster (Utility Model)	10 years	 Inventions must satisfy the following conditions: new (novelty only needs to be local⁸, i.e. a lower novelty 	Appears to be unlimited	- To obtain grant: formality examination only At any time before or after grant, upon request from the applicant, the registered proprietor or any other person, the patent office will conduct a search for the purpose of helping the applicant and/or third party to

To obtain the grant of a patent, an invention must satisfy the following conditions: (1) new; (2) differs essentially from the prior art; and (3) be susceptible of industrial application.

Information based on unofficial English translation of relevant legislation of Germany.

In Germany, a utility model may be regarded as new if it does not comprise any knowledge made available to the public within Germany.

Patents may be granted to an invention in any technical field if it satisfies the following requirements: (1) absolute novelty; (2) involves an inventive step; and (3) is susceptible of industrial application.

Country	Title	Maximum term of protection	Patentability requirement	Limitation on number of claims	Examination & Enforcement
			threshold as compared to patent applications) ⁹ ; • involve an inventive step; and • susceptible of industrial application.		ascertain whether the subject matter of an application/grant is novel. - Examination on the patentability of the subject matter of a utility model will be conducted by the patent office in a cancellation proceeding (with an avenue of appeal to the Patent Court) or in an infringement proceeding.
Japan ¹⁰	Utility Model ¹¹	10 years	 The device must satisfy the following conditions: novel (absolute novelty is required); industrially applicable; and a person ordinarily skilled in the art of the device would not have been exceedingly easy to create the device, a lower inventive threshold as compared to applications for patents¹². 	Appears to be unlimited	 To obtain grant: formality examination only. At any time before or after grant of a utility model, any person may file a request for a Utility Model Technical Opinion (the "UMTO Report"). When preparing the UMTO Report, the patent office will evaluate: (a) the novelty of the subject matter; and (b) whether the claimed device involves an inventive step. Holder of utility model or exclusive licensee must obtain a UMTO Report prior to exercise of utility model right against an alleged infringer. Examination on the patentability of the subject matter of a utility model will be conducted by the patent office in an invalidation proceeding. Appeal against the patent office's decision may be filed with the Tokyo High Court.

Information based on unofficial English translation of relevant legislation of Japan.

In Japan, "utility models" refer to devices relating to the shape or structure of an article or combination of articles. Ξ

To obtain the grant of a patent, an invention must satisfy the following conditions: (1) new; (2) industrially applicable; and (3) a person ordinarily skilled in the art of the invention would not have been able to easily make the invention. 12

An Overview of the Patent Agency Regulatory Regimes in Some Jurisdictions with an "Original Grant" Patent System

	Regulatory	Persons permitted to act as agent in applying for patent /		
Jurisaicuon	Body	conducting patent related proceedings before the patent office and the court	Kestriction on Use of Littles	Qualifications
Australia	Professional	Either:	Use of the titles "patent	Qualifications of a registered patent attorney:
	Standards	 registered patent attorneys 	agent" and "patent attorney"	 a resident of Australia;
	Board for	(they are not authorised to	is restricted to registered	- a holder of a degree, diploma, advanced diploma or
	Patent and	prepare documents to be	patent attorneys whose	graduate diploma under the Australian Qualification
	Trade Marks	issued from or filed in a	names are entered on the	Framework which is in a field of technology that contains
	Attorneys	court or to transact	Register of Patent Attorneys	potentially patentable subject matter and is awarded in the
	$(PSB)^1$	business, or conduct	kept by the Director General	higher education sector;
		proceedings, in court); or	of IP Australia.	- satisfied the requirements of an accredited course of study
		 legal practitioners 		conducted by an appropriate tertiary institution;
		(they are not allowed to		- with at least two years of working experience in patent
		prepare specification, or		related work; and
		document relating to		 of good fame, integrity or character.
		amendment of		
		specification unless they		
		are instructed by registered		
4.0		patent attorneys or the		
		amendment is directed by		
		the court).		

PSB is a statutory body established to administer the regulatory and disciplinary regimes for patent attorneys in Australia (see http://www.psb.gov.au).

Jurisdiction	Regulatory Body	Persons permitted to act as agent in applying for patent / conducting patent related proceedings before the patent office and the court	Restriction on Use of Titles	Qualifications
Mainland China	All China Patent Agents Association (authorised by the State Intellectual Property Office)	Patent agents	Use of the title "patent agent" in the provision of patent agency services for economic benefits is restricted to the patent agents with professional practice certificates.	Qualifications for obtaining a professional practice certificate: - a Chinese citizen; - aged between 18 and 70, with full capacity of civil conduct; - graduated from a higher education institution with a science degree (or possessed equivalent educational qualification); - proficient in at least one foreign language; - familiar with the Patent Law and other related laws and regulations; - with at least two years of working experience in the scientific and technological field or the legal field; - passed the Patent Agents Qualification Examination held by the Patent Agent Examination Commission; and - in employment with a patent agency (for first-time applicants: must complete one year of internship with a patent agency before a professional practice certificate may be issued).
European Patent Convention Countries	European Patent Office (EPO) and the Institute of Professional Representatives before the European Patent Office (the Institute) ²	Either: - professional representatives on the list of representatives maintained by EPO; or - legal practitioners having a place of business in a contracting state.	Use of the titles "patent attorney" and "patent agent" is restricted to professional representatives whose names appear on the list maintained by EPO.	Qualifications of a professional representative: - a national of any contracting state; - has a place of business / employment in any contracting state; - possessed a scientific or technical qualification, e.g. in biology, biochemistry, chemistry, electronics, pharmacology or physics; - trained under the supervision of a professional representative or as an employee dealing with patent matters in an industrial company established in one of the contracting states; and

The Institute is an international non-governmental public law corporation that represents the European patent profession and has its own by-laws and code of professional conduct (see http://www.patentepi.com/patentepi/en/).

Jurisdiction	Regulatory Body	Persons permitted to act as agent in applying for patent / conducting patent related proceedings before the patent office and the court	Restriction on Use of Titles	Qualifications
				 passed the European qualifying examination conducted by various boards and committees of EPO and the Institute.
New Zealand	New Zealand Intellectual Property Office (IPONZ)	Either: - registered patent attorneys (they are not authorised to transact business or conduct proceedings in court, unless they are also a barrister or solicitor); or - barristers / solicitors.	Use of the titles "patent agent" and "patent attorney" is restricted to persons whose names are entered into the register of patent attorneys kept by IPONZ.	Qualifications of a registered patent attorney: - a New Zealand citizen, Commonwealth citizen (British subject) or a citizen of the Republic of Ireland; - not less than 21 years of age; - passed the New Zealand Patent Attorney Examinations held by IPONZ; - of good character; and - in employment for a period(s) of at least three years by a patent attorney in New Zealand, the Patent Office, or in a form of employment that offers substantially similar practical experience.
Singapore	Intellectual Property Office of Singapore (IPOS)	Either: - registered patent agents (they are not authorised to represent his clients before the court, unless he is also an advocate / solicitor); or - advocates / solicitors.	Only a registered patent agent with practising certificates issued by the Registrar of Patents may hold out as a "patent agent".	Qualifications of a registered patent agent: - a resident of Singapore; - a holder of a university degree or equivalent qualification approved by the Registrar of Patents; - passed the Graduate Certificate in Intellectual Property Law course conducted by the Faculty of Law, National University of Singapore; - passed the Patent Agents Qualifying Examinations conducted by the Registrar of Patents; and - completed internship in patent agency work under the supervision of a registered patent agent, or an individual registered as a patent agent or its equivalent in Australia, Canada, New Zealand, the UK or the US, or EPO for a period of at least 12 months.

Jurisdiction	Regulatory	Persons permitted to act as agent in applying for patent / conducting patent related	Restriction on Use of Titles	Qualifications
	pody	proceedings before the patent office and the court		
				Conditions for issuance of a practising certificate: - obtained professional indemnity insurance against any liability incurred when carrying out patent agency work in that practice year.
United Kingdom	Intellectual Property Regulation Board (IPReg) ³	Any person may conduct proceedings before the patent office. However, only barristers (and in certain circumstances, solicitors and patent attorneys) may act as advocates in court.	Use of the title "patent agent" and/or "patent attorney" is restricted to those persons whose names are entered into the register of patent attorneys kept by the Chartered Institute of Patent Attorneys (CIPA); but solicitors may use the title "patent attorney" without being so registered.	Qualifications of a patent agent / patent attorney: - a holder of a degree in a science, engineering, technology or mathematics based subject conferred by a university or polytechnic in the UK (or other equivalent qualification); - passed the Qualifying Examinations held by CIPA; - either (1) completed not less than two years' full-time practice in the field of intellectual property, including substantial experience of patent attorney work, under the supervision of a registered patent attorney, or a barrister, solicitor or advocate who is engaged in or has substantial experience of patent attorney work in the UK, or (2) completed not less than four years' full-time practice in the field of intellectual property, including substantial experience of patent attorney work in the UK; - honest and trustworthy; - willing to comply with regulatory requirements; and able to manage financial affairs for themselves and clients responsibly.

IPReg is a non-governmental organization jointly set up by CIPA and the Institute of Trade Mark Attorneys to regulate the patent attorney and trade mark attorney professions (see http://www.ipreg.org.uk/index.php for further details).

Traditionally, only barristers may act as advocates in court. However, in recent years, solicitors and patent attorneys are able to act as advocates in court in certain circumstances.

The register was previously published as the "register of patent agents". This was changed to the "register of patent attorneys" on 1 January 2010.

Jurisdiction	Regulatory Body	Persons permitted to act as agent in applying for patent / conducting patent related proceedings before the patent office and the court	Restriction on Use of Titles	Qualifications
States	United States Patent and Trademark Office (USPTO)	Either: - registered patent attorneys; or - registered patent agents (they cannot conduct patent litigation in the courts or perform various services which the local jurisdiction considers as practising law).	Use of the titles "registered patent attorneys" and "registered patent agents" is restricted to persons whose names are entered on the register of attorneys and agents kept in USPTO.	Qualifications of a registered patent attorney / registered patent agent: - a US citizen; - possessed the legal, scientific, and technical qualifications necessary for him to render applicants valuable service; - passed the "Examination for Registration to Practice in Patent Matters before USPTO" held by USPTO; and - of good moral character and reputation. Additional requirement for registered patent attorneys: - admitted to the practice of law in at least one state or
				territory of the United States.