For discussion on 15 November 2016

Legislative Council Panel on Commerce and Industry

Progress of Implementation of the Patents Reform and Review of the Manpower Support for the Implementation

PURPOSE

This paper reports to Members progress that has been made in implementing a new patent system in Hong Kong, key tasks that need to be accomplished in the medium to long run, and the manpower support required under review.

BACKGROUND

Review of the local patent system

2. To ensure that the local patent system¹ would continue to meet present-day circumstances and that its further evolution would facilitate the development of Hong Kong into a regional innovation and technology hub, the Government commenced a review of the system in October 2011. A three-month public consultation exercise was launched and the Advisory Committee on Review of the Patent System in Hong Kong ("Advisory Committee") was set up².

3. Having examined the views received in the public consultation

Under the current patent system in Hong Kong, two types of patents (namely, standard patents having a maximum protection term of 20 years and short-term patents having a maximum protection term of 8 years) may be granted in Hong Kong upon applications made by the applicants. The Patents Registry, when processing a patent application, only conducts formality examination by verifying the required information and documents as filed in support of the application. Unlike many patent offices outside Hong Kong, no substantive examination is conducted by the Registry to determine, from the legal and technical perspectives, whether the invention underlying a patent application fulfils the patentability requirements under the law (i.e. whether the invention is new, involves an inventive step and is capable of industrial application).

² The terms of reference and membership of the Advisory Committee are set out at **Annex 1**.

exercise and the relevant circumstances, the Advisory Committee submitted a report to the Government in December 2012 with the following key recommendations –

- (a) introducing an Original Grant Patent (OGP) system for standard patents, with substantive examination outsourced to other patent office(s) as the starting point;
- (b) retaining the current re-registration system for grant of standard patents;³
- (c) retaining the short-term patent (STP) system with suitable refinements; and
- (d) developing a full-fledged regulatory regime on patent agency services in the long run, which has to be achieved in stages, with possible interim measures.
- 4. The Government accepted the report and briefed this Panel on 19 February 2013 (vide LC Paper No. CB(1)534/12-13(05)). With Members' support, the Government has been following up to implement the new patent system.

PROGRESS

Tasks accomplished thus far

5. Progress to date includes the following -

(a) Taking into account the expert advice of the State Intellectual Property Office (SIPO)⁴, inputs of a consultancy study on the patent systems, practices and procedures generally established in the

Standard patents are currently granted in Hong Kong based on a "re-registration system", under which a standard patent will be granted if prior grant has been obtained in one of three "designated patent offices", namely the State Intellectual Property Office in the Mainland, the United Kingdom (UK) Patent Office and the European Patent Office for patents designating the UK.

⁴ Following a cooperation arrangement signed in December 2013, the Intellectual Property Department has been working with SIPO to benefit from its support in providing the Patents Registry with technical assistance in conducting substantive examination and manpower training.

international community, including Australia, the Mainland, Singapore and the United Kingdom (UK), as well as several major regional and international patent treaties 5, intensive legislative drafting work ensued to prepare necessary legislation to provide for the fundamental legal framework for the new patent system. As a result, the Patents (Amendment) Bill 2015 (the Bill) was introduced into the Legislative Council (LegCo) in November 2015.

- (b) Following thorough scrutiny by a LegCo Bills Committee with Government assistance, the Bill was supported by LegCo and was passed into law in June 2016 as the Patents (Amendment) Ordinance 2016. The new law, however, will commence to implement the new patent system only after all preparatory work is completed.
- (c) Meanwhile, various other preparatory tasks are underway, including the drafting of subsidiary legislation on the procedural aspects, preparation of the operation manuals, design of workflows for examination of patent applications, and the planning of an electronic system in support of the new patent system.
- (d) Throughout the above process, various stakeholders were engaged to benefit from their views and advice, including the Advisory Committee and professional bodies of the legal and patent industries.

Promotion and Education

6. With establishing a sound and robust patent system as our primary goal, we see promotion and education a key part of our efforts. The Intellectual Property Department (IPD) has been reaching out to the public through international, regional and local conferences and seminars from time to time to publicise the progress of implementing the new patent system. It has also sponsored training courses and workshops on patent drafting and practice organized by the Hong Kong Productivity Council and local chambers of commerce over the past two years to promote dissemination of the latest patent knowledge and practice as well as professional development in anticipation of the new patent system. A summary of the education and promotion undertaken

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⁵ Such as the European Patent Convention and its Implementing Regulations, the Patent Co-operation Treaty and the Patent Law Treaty.

by IPD is at **Annex 2**.

- 7. The patent system is indeed an integral part of our overall IP regime, which is commanding an increasing importance in driving economic development. We need to build up an understanding and appreciation of the value of IP in the community, as well as provide tailor-made services to help businesses engender confidence in their IP assets which could be leveraged effectively to support growth. Various actions are underway, for example -
 - (a) launch of a dedicated website⁶ to provide one-stop shop for disseminating IP information;
 - (b) launch of promotion and public education campaigns to help build an IP awareness culture;
 - (c) provision of free initial consultation service for Small and medium-sized Enterprises (SMEs); and
 - (d) launch of a scheme to support SMEs for building up their manpower capacity on IP management and commercialisation.

LOOKING AHEAD

Further tasks to follow through the patent reform

- 8. The recent enactment of the Patents (Amendment) Ordinance 2016 represents the completion of a critical, first step in revamping the local patent system with the endorsement of LegCo. An array of imminent and important tasks needs to be followed through with a view to rolling out the new patent system as soon as practicable (target 2019), and IPD is stepping up its efforts to resolve the legal, technical and administrative issues in this relation. The major tasks underway include -
 - (a) formulating legislative proposals for amending the subsidiary legislation, namely the Patents (General) Rules (Cap 514C),

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⁶ www.ip.gov.hk/.

particularly to provide for the detailed procedural framework concerning applications for grant of patents under the OGP system and also post-grant substantive examination of STPs;

- (b) drawing up examination guidelines and designing workflows to set out the general principles and practice to be adopted by the Patents Registry (Registry) in processing patent cases under the new patent system;
- (c) expanding the Registry to take on a new role of undertaking substantive examination on a daily basis, notably by recruiting additional patent examiners for processing cases under the new patent system, and also planning appropriate training for the new recruits in order to equip them with the knowledge and skills required for conducting substantive examination of inventions;
- (d) setting up a new electronic processing system with the respective interfaces for external use by the public at large (e.g. for searches and electronic filings of OGP applications) and for internal use by the Registry (mainly for processing patent applications and related matters);
- (e) engaging stakeholders to keep them posted of progress and solicit inputs and advice; and
- (f) drawing up further publicity plans to promote the new patent system prior and subsequent to its introduction.
- 9. After the commencement of the new patent system, there will remain a sharp learning curve for the Registry to become capable on its own feet in daily operation, and to grow and develop into a free-standing and credible institution with indigenous substantive examination capability. Notably its staff must be equipped with highly specialised technical knowledge and skill sets. Taking Singapore as an example, it took around 18 years before it set up its own search and examination unit to start conducting its indigenous substantive examination after adopting an OGP system in 1995.

- 10. We therefore need to sustain efforts to run, maintain and enhance the system on a long term basis, focusing on the following key areas that are in line with patent-related recommendations of the Working Group on Intellectual Property (IP) Trading⁷ -
 - (a) operating the Registry to deal with all patent applications to a satisfactory professional standard;
 - (b) handling patentability and post-registration legal issues concerning application and grant of standard patents and short-term patents;
 - (c) conducting hearings on patent-related issues on behalf of the Registrar of Patents;
 - building up in-house substantive examination capability in the medium to long-term, starting with niche areas where Hong Kong has an edge in research and development in the longer run⁸;
 - (e) exploring cooperation with other patent authorities by making reference to international developments⁹, such as initiating discussions with other patent authorities for establishing bilateral and plurilateral Patent Prosecution Highways (PPHs)¹⁰;

The implementation of an OGP system is indeed one of the measures recommended by the Working Group on IP Trading which the Government set up in March 2013 to advise on the overall strategy to promote Hong Kong as a premier IP trading hub in the region. The terms of reference and membership list are set out in Annex 3. The WG released a report in March 2015 with 28 recommendations under four strategic areas, namely (i) enhancing the IP protection regime; (ii) supporting IP creation and exploitation; (iii) fostering IP intermediary services and manpower capacity; and (iv) pursuing promotion, education and external collaboration efforts.

⁸ WG Report Chapter 4, para 4.5(b). Although the Registry would initially enlist outside technical assistance in the conduct of substantive examination, establishing indigenous substantive examination capacity is essential in the medium and long run for enhancing the user-friendliness as well as the overall strength and quality of our new patent system so that it is on par with international standards. This would also strengthen Hong Kong's bargaining position to explore co-operation with other patent authorities such as mutual facilitation of application procedures, i.e. Patent Prosecution Highways (PPH - see footnote 10 below) which is in line with respective strategic observations and recommendations of the Advisory Committee and the WG, and which also meets the general expectation of the patent filers.

⁹ WG Report Chapter 4, para 4.5(c)

¹⁰ Under a PPH agreement, a patent applicant can request an accelerated processing of patent application at the patent office of second filing (OSF), when the patent office of the first filing (OFF) has already found corresponding patent claims allowable. A PPH establishes a process whereby the OSF makes use of the work already carried out by the OFF in relation to the same invention. The OSF can process the patent application quicker because the examination process begins at a more informed level. However, the OSF is not compelled to follow the opinion of the OFF and may make its own decision on whether to grant a patent.

- (f) establishing a full-fledged regulatory regime for local patent practitioners in the medium and long term in consultation with all stakeholders. IPD needs to map out the strategic implementation plans in consultation with the Advisory Committee, engage in multiple rounds of consultation and discussions with stakeholders on prescribing the qualification requirements and standards as well as transitional arrangement such as grandfathering, establishing a regulatory body and drawing up necessary legislative proposals for implementation¹¹;
- (g) conducting regular reviews of the patent law as well as operation of the new patent system, consulting stakeholders and introducing further legislative amendments as may be required from time to time ¹²; and
- (h) monitoring development of patent law and practice in the international community covering the designated patent offices under our current re-registration system and other overseas patent offices¹³; and
- (i) sustaining and deepening education efforts on exploiting the new patent system as a driver for innovation and growth and as an integral part of the wider IP regime that may spearhead development of a knowledge economy.

Manpower Support

11. IPD has set up since October 2013 a dedicated Patents Team to undertake essential work related to the patent portfolio. In no small measure

¹¹ This follow-up action as also featured in WG Report Chapter 6, paras. 6.16-6.20, in particular para. 6.18, seeks to implement the recommendations of the Advisory Committee, which also meets the growing expectation of the patent practitioners in anticipation of the commencement of the OGP system.

¹² For example, it is necessary to review the substantive patent law covering topics like Bolar exception, provisional patent applications, maximum patent protection term and patentability issues on software patents and business methods etc. in order to build in appealing features or advantages for attracting more users.

¹³ Such follow-up task includes reviewing the existing and emerging international treaties relating to patent protection (such as the *Strasbourg Agreement Concerning the International Patent Classification* and *Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure* to which China is a contracting party, and the *Patent Law Treaty*), advising on their potential application to Hong Kong and, where appropriate, planning for their implementation.

the tasks accomplished to date (paragraphs 5-7 above) are owed to its conscientious efforts¹⁴. Apart from policy and legal issues, the Patents Team is also responsible for maintaining policy oversight of the daily operation of the Registry which handles matters concerning grant of both standard patents under the current re-registration system and STPs. At present, the Team comprises, at the directorate level, a three-year supernumerary post of Assistant Director of IP (Patents) (ADIP(Patents)), and at the non-directorate level, 3.5 permanent and two time-limited posts, i.e. two Senior Solicitors (SS), 1.5 Solicitors (S)¹⁵, one Personal Secretary I (PS I) and one Assistant Clerical Officer¹⁶.

- 12. When we consulted Members on 17 December 2013¹⁷ on the creation of the supernumerary ADIP(Patents) post to lead the Patents Team, we undertook to review the long-term directorate leadership requirement in the future, taking into account development on all material fronts including preparation of the enabling legislation for the consideration of LegCo.¹⁸ This is being done in the overall context of the manpower support required for implementing the new patent system.
- On the operation side, we have secured resources and are planning to expand the Registry by creating five IP examiner posts (i.e. three at the Senior IP Examiner (SIPE) rank and two at the IP Examiner (IPE) I rank) initially. As these new post holders shall take charge of the highly specialized duties relating to substantive examination under the new patent system, we aim at recruiting those having solid academic qualification and working experience in the fields of science and technology and/or considerable experience in substantive examination so that the post-holders are in the position to perform their duties

¹⁴ The promotion and education works in paragraphs 6 and 7 were undertaken with the support of the Marketing Division of IPD.

¹⁵ The 0.5 Solicitor (S) has been re-deployed from the Registration Team of IPD. The duties of the Solicitor involve 50% of each of the work related to the Registration Team and the Patents Team.

¹⁶ The posts of ADIP(Patents), one SS and one PS I are time-limited ones up to 31 March 2017. The current notional annual salary cost at mid-point for these three posts is \$3,829,140 and the current full annual average staff cost, including salaries and staff on-cost, is \$5,103,408.

¹⁷ LC Paper No. CB(1)516/13-14(05)

¹⁸ We subsequently obtained approval of the Finance Committee on 21 February 2014 and then created the three-year time limited supernumerary ADIP(Patents) post with effect from 1 April 2014.

¹⁹ The additional notional annual salary cost at mid-point for the three SIPEs and the two IPEs I in the Registry is \$4,338,780, and the additional full annual average staff cost, including salaries and staff on-cost, is \$5,613,138.

under the new patent system. Preparation for this expansion is underway. The organisation charts showing the existing and the expanded setup of the Registry are at **Annexes 4** and **5** respectively.

- 14. On the policy and development side, we are reviewing IPD's long-term departmental manpower requirement in terms of organisation setup and directorate leadership in order to follow through the patent reform as detailed above, bearing in mind the lapse of the three time-limited posts in the Patents Team on 31 March 2017 (paragraph 11 above). In coming up with a justified proposal, we will take into account various material factors, notably -
 - (a) whether and how best the Patents Team and the Registry it oversees will need to be strengthened over time to perform the statutory functions and get on with the tasks as outlined in paragraphs 8 and 10 above;
 - (b) whether the breadth, technicality and complexity of the tasks call for strategic steer with directorate leadership; and
 - (c) whether the workload related to the patent portfolio could be shared out or absorbed by other subject teams²⁰ in IPD, bearing in mind its many other commitments as a result of growth of its departmental operations in recent years.
- 15. We will keep Members posted of the outcome of our review as soon as it is completed and seek Members' support for any proposal as may be needed.

CONCLUSION

16. Members are invited to take note of the progress of the patent reform and the way forward, and are welcome to give views.

Apart from the current ADIP(Patents) post, there are four other existing ADIP (Directorate Legal 2) posts heading the respective legal teams of advisory, copyright, hearings and registration.

Commerce, Industry and Tourism Branch Commerce and Economic Development Bureau Intellectual Property Department November 2016

Annex 1

Advisory Committee on Review of the Patent System in Hong Kong

Terms of reference

To advise the Secretary for Commerce and Economic Development on -

- (a) how the Administration should position Hong Kong's patent system, having regard to the issues outlined in the public consultation paper of October 2011 and the responses received; and
- (b) how best to implement changes to the patent system, in the light of decisions made by the Administration on the way forward.

Membership (as at October 2016)

| Name | Professional Background note |
|------|-------------------------------------|
| Name | Professional background |

Chairman

Mr Andrew LIAO Cheung-sing Senior Counsel

<u>Members</u>

Mr Ewan BEWLEY Chartered UK Patent Attorney and

Registered European Patent Attorney

Dr Sunny CHAI Ngai-chiu Industrial sector

Dr Jackson CHAN Chik-sum

Research and development sector

Professor Paul CHEUNG Academia

Ying-sheung

Ms Helen JIANG Hua Patent practitioner

Mr KWONG Chi-keung Solicitor / Chartered Arbitrator

and Accredited Mediator

Miss Alice LEE Suet-ching Academia

Mr Joseph Poon Wing-sang

Research and development sector

Dr Gabriel TONG Yui-lung Industrial sector

Dr Claudia XU Jian Academia

Director of Intellectual Property Government

Deputy Secretary for Commerce and Government

Economic Development (Commerce and Industry) 2

Assistant Commissioner for Government

Innovation and Technology

(Funding Schemes)

Note: Information is provided by members of the Advisory Committee on Review of the Patent System in Hong Kong on a voluntary basis.

Recent publicity and promotion work undertaken by IPD relating to the new patent system

A. Conferences/Seminars/Workshops in which IPD participated

1. International level

- Intervention by Hong Kong, China at the 56th Series of Meetings of the Assemblies of Member States of World Intellectual Property Organization during which the Director of Intellectual Property conveyed the message to the representatives of the Member States that Hong Kong, China would implement the new patent system (Oct 2016, Geneva, Switzerland)

2. Regional level

The new patent system was featured/will be featured in the following events:

- The Business of IP Asia Forum (Dec 2016, Hong Kong SAR)
- Mainland and Hong Kong SAR, Macau SAR Intellectual Property Symposium (October 2016, Macao SAR; April 2015, Zhongshan, PRC)
- Meeting of Guangdong/Hong Kong Expert Group on Protection of Intellectual Property Rights (August 2016, Guangzhou, PRC; August 2015, Hong Kong SAR)
- Guangdong/Hong Kong Seminar on Intellectual Property and Development of Small and Medium Enterprises (June 2016, Shenzhen, PRC; June 2015, Guangzhou, PRC)
- Exchange Programme under the Pan-Pearl River Delta Cooperation (Oct 2015, Hong Kong SAR)

3. Local Level

The new patent system will be featured in the following events:

- Talk hosted by the Hong Kong Institute of Patent Practitioners (to be confirmed)
- Lunch Talk hosted by the American Chamber of Commerce in Hong Kong (November 2016)

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B. Training courses/workshops on patent drafting and practice sponsored by IPD

- 1. "Chinese Patent Practice Training Course for the National Qualification Examination for Patent Agents" organized by the Federation of Hong Kong Industries (Sep 2016, Hong Kong SAR; October 2015, Hong Kong SAR)
- 2. "Effective Patent Search Training Workshop" organized by the Hong Kong Productivity Council (July 2016, Hong Kong SAR; January 2016, Hong Kong SAR; October 2015, Hong Kong SAR; January 2015, Hong Kong SAR)

Annex 3

Working Group on Intellectual Property Trading

Terms of reference

- (a) To advise on the overall strategies to promote the development of Hong Kong as an intellectual property trading hub; and
- (b) To identify possible policy and other support measures to facilitate intellectual property trading in Hong Kong.

Membership*

Name Professional Background note

Chairman

Mr Gregory SO Government

Vice-Chairman

Mr Andrew LIAO Cheung-sing Senior Counsel

Members

Mr Charles Nicholas BROOKE Chartered Surveyor and Valuer

Dr Jackson CHAN Chik-sum

Research and Development

Dr Toby CHAN Lap-man Brand owner and Licensing

Services

Professor Paul CHEUNG

Ying-sheung

Academia

Professor Raymond CHOY

Hon-sing

Creative Industries

Ms Yvonne CHUA Legal services/IP practitioner

Dr Roy CHUNG Chi-ping Manufacturing

Mr Peter KUNG Accounting and Tax services

Mr KWONG Chi-keung Legal services / Chartered Arbitrator

and Accredited Mediator

Mr Alfred KWOK Chan-fai High-tech social entrepreneur

Mr Anson KWOK Financial services

Mr Ronald LAI Chi-shing Risk management and Insurance

services

Dr Terence LAU Lok-ting Research and Development

Mr Jong LEE Private equity and strategic

consulting

Mr Sunny LEE Wai-kwong University administration

Dr Lewis LUK Tei IP lawyer/IP practitioner

Mr WONG Ming-yam Manufacturing

Dr Po Chi WU Educator/Venture

capitalist/Entrepreneur (US &

Asia)/Scientist

Director of Intellectual Property

(or representative)

Government

Commissioner for Innovation and

Technology (or representative)

Government

Head of Create Hong Kong (or

representative)

Government

Executive Director, Hong Kong

Trade Development Council (or

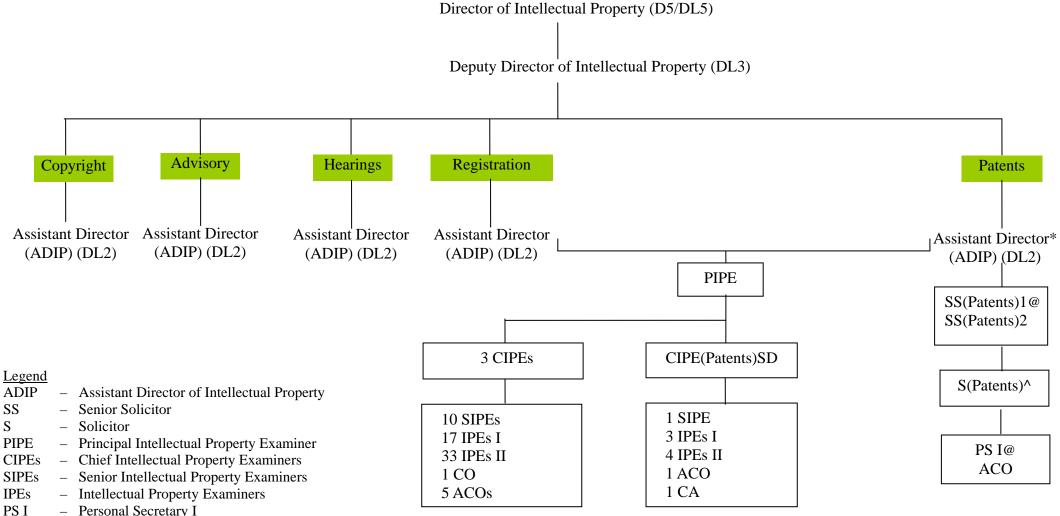
representative)

Trade promotion organisation

Note: Information is provided by members of the Working Group on Intellectual Property Trading on a voluntary basis.

^{*} Members were appointed for a term of two years with effect from 12 March 2013.

Organisation Chart of the Intellectual Property Department showing the Current Patents Team and Registry



CO – Clerical Officer

ACO – Assistant Clerical Officer

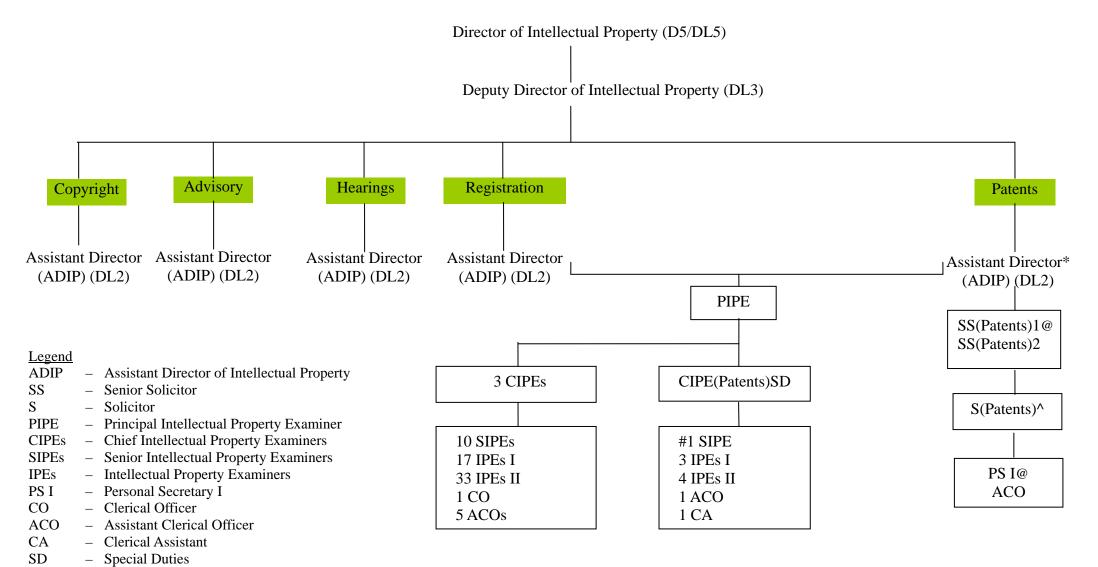
CA – Clerical Assistant SD – Special Duties

^{*} Time-limited supernumerary directorate post (up to 31 March 2017)

[@] Time-limited non-directorate posts (up to 31 March 2017)

[^] At present, we have manpower strength of 1.5 Solicitor in the Patents Team. The 0.5 Solicitor has been re-deployed from the Registration Team of IPD whose duties involve 50% of each of the work related to the Registration Team and the Patents Team.

Organisation Chart of the Intellectual Property Department showing the Patents Team and the expanded Registry



^{*} Time-limited supernumerary directorate post (up to 31 March 2017)

[@] Time-limited non-directorate posts (up to 31 March 2017)

[#] We are expanding the Patents Registry by creating 3 more SIPEs and 2 IPEs I to strengthen the substantive examination capacity of the examiners.

[^] At present, we have manpower strength of 1.5 Solicitor in the Patents Team. The 0.5 Solicitor has been re-deployed from the Registration Team of IPD whose duties involve 50% of each of the work related to the Registration Team and the Patents Team.