

## **Bills Committee on the Patents (Amendment) Bill 2015**

### **Patent application statistics in selected economies**

#### **Purpose**

At the meeting on 1 December 2015, the Administration was requested to provide background statistical information on patent applications, including the proportion of local (resident) applications, made in some smaller economies (e.g. Singapore, Malaysia, New Zealand and Israel) which have implemented the “original grant” patent (“OGP”) system to shed light on the development of innovation and technology. This paper provides the information sought.

#### **Statistics of the Selected Economies**

2. Based on the latest online data available at the World Intellectual Property Organization (“WIPO”) IP Statistics Data Center,<sup>1</sup> we have set out at **Annex A** the annual statistics of patent filings of Hong Kong, Singapore, Malaysia, New Zealand and Israel from 2012 to 2014. Such statistics cover the total count of patent applications<sup>2</sup> as well as the total count and percentage of resident applications<sup>3</sup> in each selected economy.

3. **Annex B** sets out the patent filing statistics of Brunei Darussalam before and after setting up its OGP system in 2012<sup>4</sup>.

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<sup>1</sup> <http://ipstats.wipo.int/ipstatv2/index.htm?tab=patent>

<sup>2</sup> The total count of patent applications is the sum of the count of “direct applications” and the count of “national phase entries of Patent Cooperation Treaty (“PCT”) applications” filed with a national patent office. In this connection,

(a) “direct applications” refers to applications directly filed with the national patent office; and  
(b) “national phase entries of PCT applications” refers to those patent applications filed under the PCT that have been initiated by the patent applicants to enter the national phase before the national patent office for patent grants by such patent office.

<sup>3</sup> The resident applications refer to patent applications (both direct applications and national phase entries of PCT applications) filed with a national patent office by applicants residing in the jurisdiction of the patent office.

<sup>4</sup> Singapore and Macao set up their own OGP systems in 1995 and 2000 respectively, but statistics on their patent applications prior to the setting up of their OGP systems are unavailable.

4. For reference, **Annex C** sets out the Global Innovation Index<sup>5</sup> (“GII”) ranking of Hong Kong and the selected economies from 2012 to 2014.

## Observations

5. It appears that there is no discernible pattern between the proportion of resident applications in an economy on the one hand and its innovation performance on another. An economy with a relatively small proportion of resident patent applications can still have a strong edge and performance in innovation in the global community. For example, Hong Kong and Singapore had relatively high rankings in the GII during the material period, but the proportions of their resident applications were not as high as those in Israel, New Zealand and Malaysia during the same period. In addition, while both Israel and Malaysia had similar proportions of resident applications, there was a considerable difference in their GII rankings.

6. There is a host of factors contributing to research and development in technology and innovation in an economy, an OGP system being one of them. As a crucial building block in enhancing a robust intellectual property protection regime in an economy, an OGP system is conducive to driving and promoting research and development capacities in innovation and technology, as well as patent-related transactions.

7. Many developed and advanced economies, including all the selected economies herein except Hong Kong, have made use of patent protection as a policy instrument to promote innovation and economic growth by adopting an OGP system. At the other end of the spectrum, some small, developing or less developed economies, such as British Virgin Islands, Bermuda, Falkland Islands, Fiji, Solomon Islands, Tuvalu and Vanuatu, are still adopting the re-registration system for grant of patents for various economic, historical and other reasons. In general, innovation may not be particularly crucial for these economies whether in view of their stage of economic development or in their particular circumstances.

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<sup>5</sup> The GII co-published by WIPO, Cornell University and INSEAD ranks the innovation performance of countries and economies around the world based on the assessments of the “Innovation Input” (with 5 pillars of indicators covering “Institutions”, “Human capital and research”, “Infrastructure”, “Market sophistication” and “Business sophistication”) and the “Innovation Output” (with 2 pillars of indicators covering “Knowledge and technology outputs” and “Creative outputs”) in individual countries and economies. The details of the computation of the GII can be found in the publication of the *Global Innovation Index 2015: Effective Innovation Policies for Development* at [http://www.wipo.int/edocs/pubdocs/en/wipo\\_gii\\_2015.pdf](http://www.wipo.int/edocs/pubdocs/en/wipo_gii_2015.pdf).

## **Presentation**

8. Members are invited to note the information provided in this paper.

Commerce and Economic Development Bureau  
Intellectual Property Department  
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**Statistics on patent applications and resident applications (2012-14)**

Economies	Total count of patent applications			Resident applications					
				Count			Percentage		
	2012	2013	2014	2012	2013	2014	2012	2013	2014
Hong Kong <sup>6</sup>	12,988	13,916	12,542	171	226	192	1.3%	1.6%	1.5%
Israel	6,792	6,185	6,273	1,319	1,201	1,125	19.4%	19.4%	17.9%
Malaysia	6,940	7,205	7,620	1,114	1,199	1,353	16.1%	16.6%	17.8%
New Zealand	7,099	6,781	7,728	1,425	1,614	1,636	20.1%	23.8%	21.2%
Singapore	9,685	9,722	10,312	1,081	1,143	1,303	11.2%	11.8%	12.6%

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<sup>6</sup> Patent applications in Hong Kong only refer to standard patent applications, and do not include short-term patent applications.

**Patent filing statistics of Brunei Darussalam**  
**before and after setting up OGP system in 2012**

	<b>Total count of patent applications</b>	<b>Resident applications</b>	
		<b>Count</b>	<b>Percentage</b>
2007	64	n/a	n/a
2008	75	n/a	n/a
2009	42	n/a	n/a
2012 <sup>7</sup>	31	20	64.5%
2013	35	20	57.1%
2014	117	26	22.2%

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<sup>7</sup> Statistics in 2010 and 2011 are unavailable.

**Ranking in Global Innovation Index (2012-14) of the Selected Economies**

<b>Economies</b>	<b>Ranking in Global Innovation Index</b>		
	<b>2012</b>	<b>2013</b>	<b>2014</b>
Hong Kong	8	7	10
Israel	17	14	15
Malaysia	32	32	33
New Zealand	13	17	18
Singapore	3	8	7
Brunei Darussalam <sup>8</sup>	53	74	88

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<sup>8</sup> Brunei Darussalam ranked 75 in 2011 and 48 in 2010.