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# IP Australia: Supplemental material for Senate Economics Legislation Committee Inquiry

Intellectual Property Laws Amendment (Productivity Commission Response Part 2 and Other Measures) Bill 2019

26 August 2019



### Introduction

Further to the appearance of Dr Benjamin Mitra-Kahn and Dr Paul Gardner at the hearing of the Senate Economics Legislation Committee on 19 August 2019, IP Australia is pleased to provide the following additional information to assist in the Committee's consideration of the Bill. This additional information aims to supplement and in one case correct a numerical error in answers provided to the Committee at the hearing.

#### Correction

IP Australia notes that the witnesses, Dr Gardner and Dr Mitra-Kahn, made an error in the numbers quoted at the Committee hearing, and provided some approximations for others. We apologise for the error where the witnesses stated that Australian small and medium sized enterprises (SMEs) file approximately 1600 innovation patents a year and certify 450 of them. The correct figures are that Australian SMEs file approximately 400 innovation patents a year and certify approximately 70 of them. A breakdown of exact figures by year is provided in section 2.2 below.

#### **Contents**

This supplemental material is in two parts:

- 1. The first part provides answers to the two questions on notice.
- 2. The second part provides additional information that may assist the Committee's consideration, given the lines of enquiry at the public hearings.
  - Section 2.1 provides reference to the original intent of Parliament in creating the innovation patent.
  - Section 2.2 provides complete figures for the number of applications, grants and enforceable standard and innovation patents for the period 2011-17. The data shows that Australian SMEs filed between two and two-and-a-half times as many standard patents in this period, and received between three and ten times as many enforceable standard patents as innovation patents in a given year.
  - Section 2.3 provides information on the fees, timelines and attorney costs of filing provisional, innovation and standard patent applications as available to IP Australia.
  - Section 2.4 provides a summary of the submissions made by the software industry to the public consultations undertaken on the innovation patent.

If the Committee would benefit from any further information, please contact:

# 1. Answers to questions on notice

How many Full-Time-Equivalent (FTE) staff are involved at IP Australia in the administration of innovation patents? What changes to FTE will there be at IP Australia if the innovation patent is phased out?

IP Australia's activity-based costing records indicate that examination effort for innovation patents is approximately 12.5 FTE and administrative processing is approximately 1 FTE. This gives a total of approximately 13.5 FTE in IP Australia involved in the administration of the innovation patent system.

Should the Bill be enacted as drafted, the innovation patent system will be phased out. As innovation patents will still be filed up to a year from Royal Assent; divisional filings will still be allowed after that time and innovation patents can be examined any time in the following eight years, IP Australia will be required to devote some examination and administration capacity to innovation patents during the phase out. This is expected to decrease over the eight-year period.

Patent examiners at IP Australia examine both standard and innovation patents. Any additional examination capacity from a reduction in demand for innovation patents would be transferred to the examination of standard patents. This would help to address the additional demand for standard patents that is anticipated if the innovation patent is phased out.

IP Australia carefully monitors workloads and recruits to ensure sufficient examination and administration capacity to meet demand, in accordance with the Australian Government's Cost Recovery Guidelines. If demand for examination or administration services falls due to a reduction in innovation patent work, we would expect to lower our recruitment so that we do not replace natural attrition (currently around 3% of examination staff per annum), and as a result our workforce would gradually be reduced.

Can you please provide the number of people that make an application for a provisional patent application that then flows on to a standard patent application and the number of standard patent applications that have never involved a provisional?

Table 1 shows the proportion of applications from 2000-2017 by Australian residents and what they claim priority from, if anything. Over that time period 28% of innovation patent applications filed by Australian residents originated from an Australian provisional application.

Table 1: Priority document for an Australian residents' application, 2000-17 (average percentage)

		Australian	Oversee priority	
	Australian provisional	non-provisional	Overseas priority	No priority recorded
I n o v a t i o n	28%	2%	1%	69%
S t a n d a r d	75%	2%	10%	14%

Rounding to nearest whole number, rows may not equal 100%; Source: IP Government Open Data 2018 & 2019

As discussed by Dr Mitra-Kahn at the hearing, the majority of applicants for an innovation patent do not file a provisional application. A provisional application is a useful alternative route for these applicants, as it allows for a cheaper way for a business to secure a priority claim for their innovation, and a 12 month period to test the market, undertake further research, secure investment, and determine if they wish to pursue a standard patent. The actual numbers, by year, are provided in tables 2 and 3 below:

Table 2: Priority documents for standard patent applications by Australian Residents, 2000-17 (annual)

Application Year	Australian provisional	Australian non-provisional	Overseas priority	No priority recorded	Grand Total
2000	1511		176	205	1892
2001	1751		161	227	2139
2002	1879	1	152	234	2266
2003	1850	3	158	314	2325
2004	1857	16	186	361	2420
2005	1814	27	180	415	2436
2006	2007	36	229	411	2683
2007	1993	31	264	315	2603
2008	1927	41	272	314	2554
2009	1807	43	279	336	2465
2010	1755	38	250	316	2359
2011	1700	47	251	315	2313
2012	1937	44	256	308	2545
2013	2225	59	381	396	3061
2014	1357	54	241	310	1962
2015	1622	75	252	366	2315
2016	1924	89	258	375	2646
2017 1832		58	276	407	2573

Table 3: Priority documents for Innovation patent applications by Australian residents, 2000-17 (annual)

A 1: .:	Australian	Australian	Overseas	No priority	Grand Total
Application Year	provisional		priority	recorded	
2000	5		1	5	11
2001	109		5	403	517
2002	210	2	8	590	810
2003	179	9	5	593	786
2004	188	5	6	660	859
2005	214	11	11	600	836
2006	218	21	12	581	832
2007	252	11	10	652	925
2008	267	20	12	621	920
2009	276	20	17	692	1005
2010	272	35	16	707	1030
2011	309	30	18	744	1101
2012	360	26	18	720	1124
2013	392	33	10	664	1099
2014	283	33	24	611	951
2015	309	45	16	758	1128
2016	309	31	10	719	1069
2017	315	30	24	687	1056

## 2. Further additional information

#### 2.1 Original intent of Parliament in enacting the innovation patent system.

At the public hearing, Senators asked about IP Australia's advice to government that the innovation patent system is not achieving its intended outcomes. For the Committee's reference, we provide the following extracts from the Explanatory Memorandum to the Patents Amendment (Innovation Patents) Bill 2000 outlining the intention of the system and its intended benefits.

The innovation patent system will encourage and stimulate innovation by providing a means through which Small to Medium Enterprises ('SMEs') in particular can seek rights to exclude their competitors from copying inventions in which the owners of the rights have invested money and effort to develop.

...

By providing defined rights, the system will help create certainty about what can or cannot be copied and the system also provides an avenue for appeal. The certainty and transparency of the system will reduce the compliance burden business would face without such rights.

-Explanatory Memorandum to the Patents Amendment (Innovation Patents) Bill 2000.1

Dr Mitra-Kahn noted that the economic evidence available shows that the innovation patent does not promote innovation by Australian SMEs, causes uncertainty for third parties and innovators due to low standards and the large number of unexamined innovation patents on the register, and imposes an estimated \$11 million per annum compliance burden that is mostly borne by Australian companies.

<sup>&</sup>lt;sup>1</sup> https://www.legislation.gov.au/Details/C2004B00764/Explanatory%20Memorandum/Text

#### 2.2 Numbers of patents filed, granted and certified to Australians and Australian SMEs

At the public hearing, Senators asked for information about the number of innovation patents awarded to Australian businesses. For the Committee's reference, IP Australia provides the following information about the number of standard and innovation patents filed with, and examined by, IP Australia.

Figures below represent the most accurate figures that IP Australia's Office of the Chief Economist currently has available. These include figures from the IP Australia Intellectual Property Government Open Data (IPGOD) 2018, and where available its 2019 update. These databases contain data about filing, granting and certifying of applications, application lifecycle and the point of origin of applications.<sup>2</sup>

IP Australia notes that in some cases these figures are slightly different from those provided to the Committee by Mr John Gibbs. This is because Mr Gibbs used an IP Australia database (<a href="IPGOLD">IPGOLD</a>), which at the time of his extraction was missing some patent data (around 20-25% of the relevant observations).

#### a. Australian SMEs file 2-2.5 times more standard patents than innovation patents

Tables 4 and 5 provide the total number of innovation and standard patent applications filed at IP Australia between 2010 and 2017, breaking down the totals by origin (Australian or foreign) and those filed by Australian SMEs. Over the period, Australian SMEs filed between two and two-and-a-half times as many standard patent applications as they did innovation patent applications.

**Table 4: Standard patent applications** 

Year	2010	2011	2012	2013	2014	2015	2016	2017
Total	24905	25565	26472	29781	26035	28629	28390	28902
Foreign	22546	23252	23927	26720	24073	26314	25744	26329
Australian	2359	2313	2545	3061	1962	2315	2646	2573
Australian SME	970	1015	1051	1350	893	911	1230	1196

Table 5: Innovation patent applications

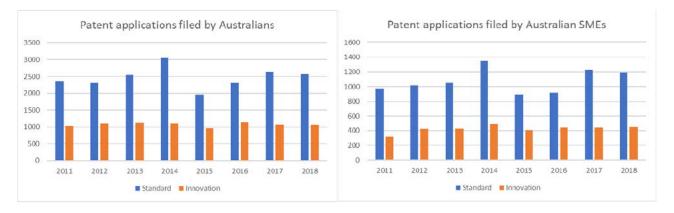
Year	2010	2011	2012	2013	2014	2015	2016	2017
Total	1538	1767	1947	1770	1602	1855	2318	1828
Foreign	508	666	823	671	651	727	1249	772
Australian	1030	1101	1124	1099	951	1128	1069	1056
Australian SME	322	421	428	493	404	441	438	453

<sup>&</sup>lt;sup>2</sup> Note that the 2019 edition of IPGOD does not at the time of preparing this submission have complete data breaking down applications by applicant type, so the data is provided up to the end of 2017.

Figures 1 and 2 below show the total number of applications filed by Australian residents and Australian SMEs in each year, with standard applications in blue and innovation patent applications in orange:

Figure 1: Applications filed by Australians

Figure 2: Applications filed by Australian SMEs



#### b. Granted innovation patents are often the same as filed innovation patents.

An innovation patent is granted after a formalities check, with no substantive examination, and it cannot be legally enforced until it has been examined (on request). As Table 6 illustrates, when compared to Table 5, most filed innovation patents are 'granted' – or the equivalent of 95% of applications filed from 2011-2017.<sup>3</sup>

Table 6: Granted innovation patents

Year	2011	2012	2013	2014	2015	2016	2017
Total	1585	1790	1816	1525	1805	1937	1923
Foreign	487	656	639	559	762	875	863
Australian	1098	1134	1177	966	1043	1062	1060
Australian SME	406	398	503	408	431	457	438

As noted by Dr Mitra-Kahn at the hearing, 'grant' is a confusing term, as a granted innovation patent does not represent an enforceable right, they are broadly the applications received. Confusion around innovation patents that are labelled as granted but are not enforceable is one reason why the system causes uncertainty to business.

#### c. Australian SMEs receive 3-10 times as many enforceable standard patents

A standard patent is granted after substantive examination by IP Australia, at which point it is enforceable in a court against competitors. The equivalent stage for an innovation patent is when it is 'certified' meaning it has passed substantive examination by IP Australia and can be enforced in a court against competitors.

As Tables 7 and 8 illustrate, Australian SMEs received between three and ten times as many enforceable standard patents in a given year between 2011 and 2017 when compared to innovation patents.

<sup>&</sup>lt;sup>3</sup> Some grants occur in the year after the application is filed, so this is not a perfect measurement of the grant rate.

Table 7: Standard patent grants

Year	2011	2012	2013	2014	2015	2016	2017
Total	17874	17725	17112	19299	23094	23744	22737
Foreign	16590	16387	15959	18075	21432	22253	21515
Australian	1284	1338	1153	1224	1662	1491	1222
Australian SME	502	499	446	494	652	648	580

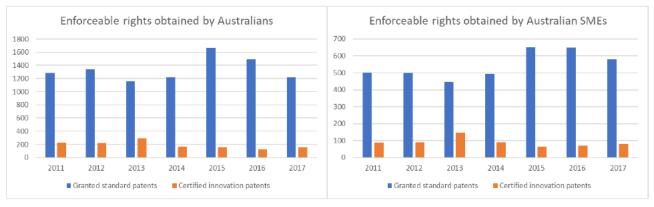
Table 8: Innovation patent certifications

Year	2011	2012	2013	2014	2015	2016	2017
Total	316	317	450	229	238	237	274
Foreign	90	95	159	62	86	114	123
Australian	226	222	291	167	152	123	151
Australian SME	87	90	145	89	65	69	79

Figure 3 and 4 below illustrate the like-for-like comparison of enforceable rights received by Australian applicants and Australian SMEs.

Figure 3: Enforceable rights for Australians

Figure 4: Enforceable rights for Australian SMEs



#### 2.3 Costs and timeframes for patents.

At the public hearing, Senators asked for information about the costs involved in obtaining an innovation patent, and how this compares to pursuing a provisional or standard patent application. For the Committee's reference, IP Australia provides the following information about the costs and timeframes involved in applying for and examination of patents.

#### a. Official fees

IP Australia's fees for the filing and examination of an innovation patent (\$680) are \$180 less than that of a standard patent (\$860). IP Australia's fees are structured to provide a low-cost entry bar. IP Australia's fees for all types of patent application, including the annual renewal fees, are in the following table.

Table 9: IP Australia fees

Fee	Provisional	Innovation	Standard	
Filing	\$110	\$180		\$370
Examination	n/a	\$500		\$490
Acceptance	n/a	n/a		\$250
Annual Renewal (anniversary) <sup>4</sup>	n/a	(2 <sup>nd</sup> to 4 <sup>th</sup> ) \$110	(2 <sup>nd</sup> to 3 <sup>rd</sup> )	\$0
		(5 <sup>th</sup> to 7 <sup>th</sup> ) \$220	(4 <sup>th</sup> to 9 <sup>th</sup> )	\$300
			(10 <sup>th</sup> to 14 <sup>th</sup> )	\$550
			(15 <sup>th</sup> to 19 <sup>th</sup> )	\$1250
			(20 <sup>th</sup> to 24 <sup>th</sup> )	\$2550

#### b. Attorney fees

The cost of seeking a patent will in most cases involve payment for professional advice. Most applicants for standard and innovation patents are represented by a registered patent attorney.

Professional advice fees typically make up the bulk of expenses for applicants and are similar for both standard and innovation patents. The Institute of Patent and Trade Mark Attorneys has stated in its submission to the Advisory Council on IP 2015 review of the innovation patent system that:

The costs associated with the initial professional drafting and filing of an innovation patent application are generally similar to those for a standard patent application, given that both forms of application have the same requirements for disclosure and the like.

-Institute of Patent and Trade Mark Attorneys (2015)5

Based on advice about professional fees and the time taken to draft patent specifications from research done by KPMG<sup>6</sup>, IP Australia estimates that it costs approximately \$6000-\$10,000 in professional fees to draft and file a patent specification. Innovation patents are more likely to be on the lower end of this scale due to the fact that they are shorter on average, whereas standard applications are towards the higher.

<sup>&</sup>lt;sup>4</sup> Term: innovation patent: 8 years; standard patent: 20 years (up to 25 years for certain pharmaceutical patents).

<sup>&</sup>lt;sup>5</sup> https://www.ipaustralia.gov.au/sites/default/files/ficpi australia - ipta attachment 3.pdf

<sup>&</sup>lt;sup>6</sup> https://www.ipaustralia.gov.au/sites/g/files/net856/f/reports\_publications/ipa\_regulatory\_costing\_final\_report.pdf

Professional fees for filing a provisional specification are likely to vary depending on the amount of detail included in the provisional. However, IP Australia notes that some of the professional fees paid during the drafting of a provisional specification may be saved during subsequent filing of a standard patent application when material can be re-used by the attorney.

#### c. Examination time

The time taken to complete the examination process will vary depending on the number of issues the examiner raises and how quickly the applicant responds to the examiner's reports.

IP Australia offers expedited examination of standard patents at no additional cost, and it is comparable in speed to the examination of an innovation patent.

The relevant requirements of the patents legislation and IP Australia's Customer Service Charter are set out in the following table.

Table 10: Examination timelines

	Innovation Patent Standard Patent		d Patent
		Expedited	Normal
Time to issue examination report following receipt of examination request.	8 weeks	8 weeks	12 months
Maximum time period to complete examination.	6 months	12 months	12 months

IP Australia also facilitates expedited pathways into overseas patent offices (including the United States) through the Global Patent Prosecution Highway. This is only available for standard patents, as innovation patents have no equivalent overseas. Likewise, a provisional application leaves open the option of pursuing standard and international patent protection through the Patent Cooperation Treaty.

https://www.ipaustralia.gov.au/patents/applying-patent/standard-patent-application-process/examinationstandard-patent/expedited-examination-standard-patents

#### 2.4 Views of the software industry on innovation patents.

At the public hearing, Senators asked for information about the views of the software industry on innovation patents. For the Committee's reference, IP Australia provides the following information about representatives and members of the software industry who made submissions to consultations on the innovation patent in Table 11.

#### Consultations included:

- ACIP 2015 Review of the Innovation Patent (note: submitters have been de-identified because submissions are not publicly available)
- IP Australia's consultation on recommendations made by ACIP: 2015
- Productivity Commission's Inquiry into Australia's IP arrangements Issues Paper consultation:
  2015b (note that we have not linked to the submission of individuals for the inquiry due to the volume, but several were made).
- Productivity Commission's Inquiry into Australia's IP arrangements Draft Report consultation: 2016
- Exposure draft of Intellectual Property Laws Amendment (Productivity Commission Response Part 1 and Other Measures) Bill 2017: (no submissions from software industry).
- Exposure draft of Intellectual Property Laws Amendment (Productivity Commission Response Part 2 and Other Measures) Bill 2018: (no submissions from software industry).

Table 11: Submissions to consultations

Table 11: Submissions to consultations	
Support Abolition	No position
15 Individuals from the industry making	Australian Information Industry Association –
submissions (2015: <u>1</u> , <u>2</u> , <u>3</u> , <u>4</u> , <u>5</u> , <u>6</u> , <u>7</u> , <u>8</u> , <u>9</u> , <u>10</u> , <u>11</u> ,	2015b 2016 (noting mixed views of members)
<u>12, 13, 14, 15</u> ).	
Open Source Industry Australia 2015, 2015b, 2016	
ZamAudio.com 2015	Support Retention and Reform
Isignthis.com 2016	BSA – Business Software Alliance 2015 2016
Intel Corporation 2015	Telstra 2015 2016
Digital Industry Group Incorporated 2015 2016	1 software/information technology industry body
Microsoft 2016	1 software developer
2 computer systems administrator groups	1 computer scientist
3 software engineers	1 software company
5 software developers	
2 computer scientists	
1 data security company	-
1 open source software company	