



2 October 2015

IP Australia Mr David Simmons

By Email consultation@ipaustralia.gov.au

Dear Mr Simmons

#### **Innovation Patent Review**

We refer to the IP Australia consultation paper of August 2015 (the "Consultation Paper") regarding ACIP's recommendation that the Government consider abolition of the Innovation Patent System.

These submissions come jointly from the Institute of Patent and Trade Mark Attorneys of Australia (IPTA) and FICPI Australia.

#### 1.0 IPTA and FICPI Australia

IPTA is a voluntary organisation representing registered patent attorneys, registered trade mark attorneys and student members in the process of qualifying for registration in Australia. The membership of IPTA includes over 87% of registered patent attorneys located in Australia and it is believed that its members make up more than 90% of registered patent attorneys in active practice in Australia. The membership of IPTA includes registered patent attorneys in private practice along with patent attorneys working in industry and others that practice as barristers. IPTA members represent large local and foreign corporations, SMEs, universities, research institutes and individual inventors.

FICPI Australia is the National Association of the International Federation of Intellectual Property Attorneys (FICPI). The International Federation of Intellectual Property Attorneys takes its membership from patent and trade mark attorneys in private practice from more than 85 countries. The organisation was founded in 1906. Further details regarding FICPI can be found at www.ficpi.org.

## 2.0 Innovation Patent System - Policy Objective

As stated in the Consultation Paper, a principal policy objective of the Innovation Patent System is to stimulate innovation in Australian SMEs, and in a manner not possible through the standard patent system.

In June 2014, ACIP issued a report with respect to the Innovation Patent System but was unable to find sufficient empirical evidence to enable an assessment of the effectiveness of the system in meeting this policy objective. Since that time IP Australia has commissioned and published a research paper 'The Economic Impact of Innovation Patents' (the

"Economic Report"). This report was used by ACIP in May 2015 in re-assessing its position and in recommending that the Government consider abolishing the system.

In the IP Australia consultation paper it is stated that a conclusion of the Economic Report was 'that the Innovation Patent System is failing to incentivise SMEs to innovate'. However, this is not a conclusion of the Economic Report. In the report it is stated:

'We cannot, on the available evidence, say whether the Innovation Patent System incentivised R&D expenditure'. 1

This key question remains unanswered and both IPTA and FICPI Australia consider it inappropriate for a recommendation to be made to Government for the abolition of the Innovation Patent System based on a report which does not provide any new economic data on this key issue.

### 3.0 Importance of Innovation to the Australian Economy

Innovation is the key to Australia's medium and long-term economic security<sup>2</sup>. The Innovation Patent System provides a much needed low cost entry point for the protection of new innovations in Australia. Both IPTA and FICPI Australia consider the Innovation Patent System to be an important component in a suite of laws and policy settings which together encourage innovation in this country. It is considered simplistic to formulate policy with respect to innovation (and the Innovation Patent System in particular) without considering how each aspect of the current laws work together in incentivising innovation. The Economic Report makes no attempt to do this.

We are encouraged that the Government is committed to providing the correct policy settings to encourage innovation (see for example Prime Minister Turnbull's statement of 19 June 2015 that "Government must lead the way with clear and detailed education, innovation and technology policies"). Both IPTA and FICPI Australia consider that the abolition of the Innovation Patent System with nothing to take its place would act as a brake on innovation and that this would be felt most acutely in the Australian manufacturing sector<sup>3</sup>.

### 4.0 IPTA and FICPI Australia Support the Innovation Patent System

Both IPTA and FICPI Australia urge the Government to retain the Innovation Patent System and note:

- i) a second tier system for the protection of inventions has been a key component of the intellectual property system in Australia since the introduction of the petty patent system in 1979.
- ii) such a system enables SMEs and individuals to secure intellectual property rights more quickly and at a lower cost than the standard patent system.
- iii) second level innovation protection systems are operated in more than 55 countries around the world including major trading partners such as Germany, Japan and China.
- iv) if the innovation patent system was abolished with nothing set up in its place, the outcome would be either:

<sup>&</sup>lt;sup>1</sup> Economic Report, Section 2.2, p.11

<sup>&</sup>lt;sup>2</sup> Australian Innovation System Report 2014, pages 16-29

<sup>&</sup>lt;sup>3</sup> Economic Report, Section 2.2, p.11 (where it is noted that for the Australian manufacturing industry, the innovation patent system is used as a way to protect successful R&D expenditure).

- a) higher costs for Australian SMEs in protecting their inventions through the standard patent system; or
- b) developments going unprotected. (or not being developed in the first place, in the absence of innovation protection)
- v) SMEs in Australia use the system successfully. In the last 3 years more than one third of all reported first instance patent infringement decisions have been based on innovation patent rights and in the great majority of those, the patentee was an Australian SME.
- vi) The ACIP recommendation is based on the Economic Report. We do not consider that the Economic Report adequately addresses the relevant issues. In particular, the report does not:
  - a) attribute any value to the Australian national economy for the publication of new innovations and developments, or the availability of new commercial products and services resulting from such new innovations and developments. The rationale for any patent system is that government confers a limited monopoly right in exchange for the disclosure of new developments and inventions which might otherwise be kept secret. The abolition of the innovation patent system would result in several innovations being retained in confidence rather than being published, or never being developed in the first place in the absence of the incentive provided by the innovation patent system to innovate.
  - b) the Economic Report significantly under-estimates the private value of innovation patents to patent applicants. The Economic Report indicates that the value of innovation patents to applicants per year is in the order of \$10-40 million. Independent economic analysis using the results of the survey conducted by Verve Economics estimates the private value of the Innovation Patent System to patent applicants to be no less than three times these figures and probably more. Annexure 1 to these submissions is a short paper commissioned by both IPTA and FICPI Australia by Professor Stefan Wagner of ESMT European School of Management Technology, Berlin with respect to the estimates outlined in the Economic Report. The Economic Report also totally disregards the private value of underlying inventions that are the subject of innovation patents but which would never have been developed in the absence of the innovation patent system.
  - c) The Economic Report estimates regulatory costs in securing innovation patent rights each year to be in the order of \$11 million. We consider this figure to be significantly inflated. Based on our research, a more realistic estimate is that 'regulatory costs' associated with the system are closer to \$4.3 million per year.
  - d) The Economic Report makes the misleading claim that 95% of the regulatory cost of the system is borne by SMEs and private inventors. However, this is based on the assumptions that "regulatory costs" equal application and maintenance costs and that these costs are about the same for all applicants, and that 95% of the applications filed are by SMEs and private inventors. More accurate analysis (detailed below) reveals that application costs borne by large entities are on average

more than four times as much as application costs borne by private inventors.

e) The Economic Report makes the misleading claim that large firms benefit disproportionately from the Innovation Patent System, implying that small firms pay for it while large firms reap the benefits. If judged by published Federal Court decisions, SMEs are by far the biggest beneficiaries of the system.

FICPI has long supported a second tier patent right. **Annexure 2** is a copy of a FICPI report issued earlier in 2015 in which the benefits of such rights are identified.

## 5.0 The Economic Report

The Economic Report does not incorporate a list of key findings. A number of conclusions are set out in the Executive Summary of the paper and we address these in turn:

# Statement 1. The evidence shows that firms who file innovation patents are less likely to participate in the standard patent system afterwards.

ACIP in its prepared statement of May 2015 interpreted this as meaning that "Australian SMEs are less likely to use the patent system after filing an innovation patent than a company that has not previously filed an innovation patent." This cannot possibly be true. According to the Australian Bureau of Statistics, there are 2.1 million businesses in Australia, of which perhaps 20,000 have filed a patent application. Thus the likelihood of a company which has not previously filed an innovation patent using the patent system is no more than about 1%. Based on the very limited information available (see below), the average SME innovation patent applicant files 0.43 more innovation patent applications after its first application.

Statement 1 must therefore have been intended to mean that innovation patent applicants are less likely to file further Australian patent applications than are standard patent applicants. The most obvious way to test this is to look at the average number of patent applications by innovation patent applicants.

Unfortunately the IP Government Open Data tables on which the economic research is said to be based are too unreliable and incomplete to be able to answer this simple question. The data from File 102 of the IPGOD Data Resource, 2015 (the only table which provides applicant names) indicates that, in the years 2001 to 2014, 14,101 innovation patent applications were filed by Australian applicants. However, for 8,417 cases (60% of them), the applicant's name is given as "NON-ENTITY 94669" (with the number different for each case). Automated analysis would therefore assume that every case where the applicant was unidentified would have been filed by a different applicant, biasing the results towards the conclusion that innovation patent applicants file very few applications.

	Applications by Australian Applicants	Unidentified Applicant	Identified Applicant
Innovation	14101	8417	5684
Standard	39931	12857	27074

Table 1

It is doubtful therefore whether it is possible to get any meaningful information out of the IP Government Open Data. Using the only available evidence, which is for the minority of cases where the applicant is identified, the following information is obtained after limiting the data to complete innovation patent applications filed by Australian applicants and excluding all cases where the applicant is identified as a big entity:

	All SME/Individual Applications	Applications Identified Applicants	with	Discrete Applicants	Average per Applicant
Innovation	13242	4825		3364	1.43

Table 2

The IP Government Open Data does not have any applicant information relating to provisional applications, although more provisional applications are filed by Australian applicants than all other types of Australian applications combined. File 101 of the IPGOD 2015 Data Resource, which does not contain any information before 2003, reveals the following numbers of applications made from 2003 to 2014 inclusive by Australian applicants, excluding those made by applicants identified as big entities:

		National		
	Innovation	Phase	<b>Provisional</b>	Standard
Applications	11671	8454	73324	12793

Table 3

As is apparent from these figures, a significant majority of provisional applications do not proceed further by way of filing an associated innovation, standard or PCT application. While nearly all Australian-originating standard patents claim priority from a provisional application, only about 15% of non-divisional innovation patents claim priority from a provisional application (based on the further research described under Statement 2 below). Accordingly, most Australian innovation patent applicants are using the innovation patent system as a substitute for the provisional application/standard patent route, and we should expect to see a high rate of abandonment of innovation patents similar to that of provisional applications.

**Conclusion**: Statement 1 is misleading. The data available cannot validly be interpreted as an indication that the innovation patent system is discouraging SMEs from applying for patents.

# Statement 2. The great majority of Australian SMEs and private inventors appear to gain little benefit from the system.

This statement appears to relate to section 3.4 of the report, in which it is asserted that "the decision to certify, and the decision to pay the renewal fee to maintain patents is a proxy for the value of the patent to the applicant".

The conclusion stated in this statement is not correct. In fact, the lack of a requirement to certify an innovation patent has always been promoted as one of the advantages of the system. Unless there is a potential infringement, the patentee need not go to the expense and effort of certification. If no potential infringement ever arises, the patentee never needs to seek certification. Many patentees do not expend the time and money to seek certification unnecessarily. Indeed there are disadvantages in seeking certification before needing to do so, as deferment leaves greater flexibility in shaping the final claim set. For example, any

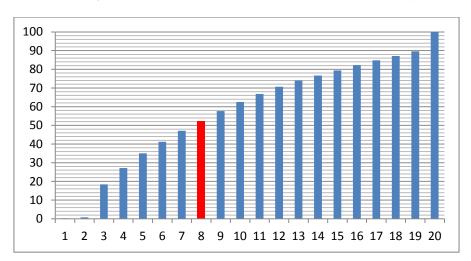
amendment required to the claims to distinguish the invention from prior art can be done with knowledge of the potential infringement.

Thus there is no logical connection between patent value and seeking certification, unless one were to argue that a patent's value is proportionate to the extent to which it gets infringed (in this regard, see the reference under Statement 4 below to further research into patents which have actually been enforced). Further, many very valuable patents are never infringed. Many standard patents protecting very valuable products are never infringed as third parties recognise the patents to be valid and enforceable (and usually not because they have been examined and granted but as a result of private analysis).

With regard to the fact that the majority of innovation patents expire through failure to pay renewal fees, that is simply the nature of patents. As indicated in respect of Statement 1 above, most Australian innovation patent applicants are using the innovation patent system as an alternative to the provisional application/standard patent route, rather than as an add-on. A significant majority of provisional applications go no further than their initial 12-month term. The first patent application for an invention gives the inventor time to consider the viability of the invention before deciding whether to incur further expense in Australia or to invest in patent applications in other countries. In the majority of cases, the applicant presumably decides that the further expense is not warranted. Thus a high rate of abandonment of innovation patents, particularly by individual inventor-applicants, is to be expected.

In any event, standard patents also have a high rate of early abandonment, with the majority being abandoned less than half way through their term.

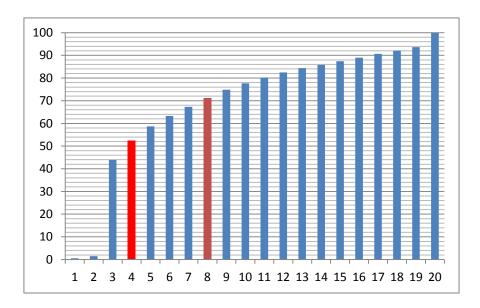
The following chart shows that the median term for all standard patents and patent applications (the point by which more than 50% of patents/applications have been abandoned) is less than 8 years<sup>4</sup>. In other words, more than 50% of standard patents are abandoned before the 8-year term of an innovation patent would have expired.



This effect becomes far more pronounced where the applicant/owner is an Australian SME or individual. The median term for standard patents and patent applications owned by Australian SMEs and individuals is less than 4 years, and more than 70% of such patents are abandoned in less than 8 years.

6

<sup>&</sup>lt;sup>4</sup> The tiny number of patents which have their term extended beyond 20 years have been treated as if their term was 20 years for the purpose of this analysis.



The fact that a patent is abandoned before the end of its term does not mean that it was of no value to the applicant at the time of filing. Patents are by their very nature contingent rights, which may in the future be highly valuable or worthless, depending on facts which at the time are unknown. Before filing a patent application, the applicant makes a rational decision that the chance of future value offered by the application is worth the application cost.

In section 4 of the Economic Report, an attempt is made to define the costs and benefits of the Innovation Patent System. Although the appendices to the report give considerable details of calculations undertaken, they do not reveal the specific figures used for determining costs; nonetheless these can be estimated by looking at Figures 2 and 3 and Table 6 in the report. Figure 2 shows that approximately 1200 innovation patent applications are filed per year by Australian applicants. Figure 3 shows that 6% of these are filed by large firms, 31% by SMEs and 63% by private inventors. Table 6 represents that the annual total "regulatory costs" (which excludes government fees) of the innovation patent system are \$11,139,000, with filing costs comprising 91% of the total regulatory costs, and the other regulatory costs, being renewal, examination and opposition costs, comprising only about 9% of the total regulatory costs. Table 6 also represents that the annual filing regulatory costs are \$561,000 for large firms, \$3.18 million for SMEs and \$6.359 million for private inventors.

	Large Firms	SMEs	Private Inventors	Total
Percentage of Applications	6	31	63	100
Number of Applications	72	372	756	1200
Filing Regulatory Costs	\$561,000	\$3,180,000	\$6,359,000	\$10,100,000
Cost per Application	\$7,792	\$8,548	\$8,411	\$8,417

Table 4

Whilst it is unstated in the Economic Report, these figures represent the surprising assumption that private inventors and SMEs, the majority of whom are not represented by patent attorneys, incur more costs in filing their innovation patent applications than do large firms, which are almost always represented by patent attorneys.

A review of pages 86 to 88 of the appendices to the Economic Report reveals the assumptions that have been adopted in calculating the "regulatory costs". In particular, it is assumed that every unrepresented private inventor has spent \$76.48 per hour for 37.5 hours employing a "generic professional employee" to meet the regulatory requirements in respect of each innovation patent application. The table also indicates that the number of applications used for the filing cost calculation was between 1788 and 2054, which seems to be a mistake, given that the number should have been around 1200.

The most obvious problem with the assumptions underlying this line of reasoning is that different applicants clearly put differing amounts of effort into their patent applications. The applicant who files a patent specification consisting of 3 pages has clearly put less effort into the exercise than an applicant who files a specification of 100 pages.

To obtain a more realistic estimation of the "regulatory costs" associated with filing innovation patent applications, research was conducted on the first 300 innovation patent applications filed during 2015. Of these, 221 applications were by Australian applicants. The patent specification for each application was retrieved manually and reviewed, and this was used to estimate the number of hours spent preparing and filing the application. For self-filed applications, 3 hours was allowed for filing the application plus 3 hours per page of text in the specification at the hourly rates used in the Economic Report. For attorney-filed applications, an attorney fee ranging from \$3500 for a 3-page specification to \$8500 for a 20-page specification was allowed, plus between 6 and 12 hours of the applicant's time. Applicants were manually classified as individuals, SMEs and large entities. For divisional applications, a fixed attorney fee of \$3000 was allowed plus 3 hours of the applicant's time.

#### The results were as follows:

	Large	SME	Individual
Applications	20	96	105
Self-filed	0	39	76
Attorney-filed	20	57	29
Divisional	10	14	8
% divisionals	50	14.6	7.6
Cost per Divisional application	\$3,230	\$3,230	\$3,230
Non-Divisionals	10	82	97
Cost per Non-Divisional application	\$7,600	\$4,150	\$1,832

Table 5

When these calculations are applied back into Table 6 of the Economic Report, the following results (per annum) are obtained:

	Large Firms	SMEs	Private Inventors	Total
Percentage of				
Applications (from the				
<b>Economic Report)</b>	6	31	63	100
Number of Applications	72	372	756	1,200
<b>Est Number Divisionals</b>	36	54	57	147
Cost per Divisional	\$3,230	\$3,230	\$3,230	\$3,230
<b>Total for Divisionals</b>	\$116,280	\$174,420	\$184,110	\$474,810
Est Number Non-	36	318	699	1,053

Divisionals				
Cost per Application	\$7,600	\$4,150	\$1,832	\$2,729
Total for Non-divisionals	\$273,600	\$1,319,700	\$1,280,568	\$2,873,868
Filing Regulatory Costs	\$389,880	\$1,494,120	\$1,464,678	\$3,348,678

Table 6

Thus, according to more realistic assumptions, the total filing 'regulatory costs' associated with the innovation patent system are around \$3.3 million per annum, or about one third of what is estimated in the Economic Report. Even if the values for the other regulatory costs (renewal, examination and opposition) set out in the Economic Report are accepted without question, the total annual regulatory costs of the system would only be about \$4.3 million, as opposed to about \$11.1 million as estimated in the Economic Report.

Whilst the total renewal, examination and opposition costs has not been analysed for this submission, a simple analysis shows that the approach taken in the Economic Report to the allocation of renewal, examination and opposition costs between large firms, SMEs and private investors is fundamentally flawed. Surprisingly, Table 6 of the Economic Report allocates renewal, examination and opposition regulatory costs between large firms, SMEs and private inventors on the same basis as the allocation of filing costs, based solely on the number of innovation patent applications filed by each of the three sectors. No consideration is given to which applications are renewed, subject to certification examination or opposed. That is, Table 6 assumes that all applications are subject to the same renewal, examination and opposition costs. This is even in light of the findings in section 3.3 of the Economic Report that large firms have a propensity to renew and certify their innovation patents, whilst SMEs and private inventors have a much greater propensity not to renew or certify their innovation patents. The regulatory costs associated with renewal and certification examination would thus clearly be borne primarily by large firms, rather than SMEs and private inventors as set out in Table 6. Similarly, it is expected that large firms would also have a greater tendency to be involved in opposition proceedings, and to engage professional services of patent attorneys in prosecuting such opposition proceedings, such that the opposition regulatory costs would also be largely borne by large firms.

Referring now to the report's calculation of the benefits of the innovation patent system, the only available data was from a survey conducted by Verve Economics. The survey had asked innovation patent owners to estimate the value of their patents, in the ranges less than \$1000, \$1000 to \$10,000, \$10,001 to \$100,000, \$100,001 to \$1,000,000, and more than \$1,000,000.

Some 487 innovation patent owners responded, with 29% of respondents valuing their innovation patent at between \$10,000 and \$100,000, 35% valuing it between \$100,000 and \$1 million, and 25% valuing it at more than \$1 million. There was no upper boundary, but three respondents did estimate values of \$10 million, \$3 million and \$4 million respectively.

The Economic Report analysis involved the application of a number of deductions to determine that the "upper limit" of the total annual value of the innovation patent system to applicants as a whole is \$40 million. These deductions included:

- an assumption that the patents valued by respondents to the survey at over \$1 million all have a value of exactly \$1 million;
- an assumption that the mid-range results are overestimated by 20%;
- an assumption that only about 8.3 to 12.8% of the value of a patented invention relates to the patent and the other 90% relates to the underlying invention

The major difficulty is that there is no sound basis for these deductions, yet they result in the confident pronouncement that "it is likely that the system is a net cost to most of the SMEs that use it". As the calculations in Appendix 4.2 of the Economic Report indicate, the methodology has a severe impact on reliability. What the report does not admit is the very large size of the impact on reliability. IPTA and FICPI Australia commissioned Professor Stefan Wagner of the ESMT – Economic School of Management Technology in Berlin to review the methodology used in the Economic Report on this issue. Professor Wagner's report is Annexure 1 to these submissions. Importantly, Professor Wagner identifies that the calculations used in the Economic Report incorrectly assume that the Arora patent premiums are conditioned on patent certification. This mistake results in an estimation which is low by at least a factor of 3. This mistake has also been confirmed to IPTA and FICPI Australia by Professor Marco Ceccagnoli, the lead author of the Arora paper, who has advised that the patent premium is conditional on applying for a patent (not grant or certification).

Even if the assumption that 90% of the value of a patented invention relates to the underlying invention is accepted, this value of underlying inventions should not be disregarded as has been done in the case in the Economic Report. The Economic Report assumes that all patented innovations would have been developed even in the absence of the innovation patent system. This simply cannot be the case. As acknowledged in the Economic Report, a key objective of the innovation patent system is to encourage innovation by Australian SMEs, and in fact the key objective of patent systems in general is to encourage innovation. The Economic Report does not seek to assess whether in fact this policy objective is met by considering whether the same level of innovation would exist in the absence of the innovation patent system. One must assume that the innovation patent system is in fact at least partially meeting its objective and that not all innovations that are the subject of innovation patent protection would necessarily have been developed in the absence of the incentive provided by the innovation patent system. Accordingly, it can only be assumed that a proportion of innovations that are the subject of innovation patent protection would not have been developed in the absence of the innovation patent system and that, accordingly, the assumed 90% value of such patented innovations said to relate to the underlying invention would never have been fully realised. This potential loss in underlying invention value in the absence of an innovation patent system must be considered to form part of the value of the innovation patent system to patent applicants, yet has inexplicably been disregarded in the Economic Report.

The Economic Report indicates that the total annual value of the innovation patent system to applicants as a whole is between \$10 million and \$40 million, as compared with a regulatory cost to applicants of more than \$10 million. More accurate analysis of the costs and benefits shows an annual cost of around \$3.5 million and annual benefits of well over \$100 million, even when the annual benefits are solely limited to patent premium value to patent applicants, disregarding the value associated with underlying inventions that would not otherwise have been developed without the innovation patent system.

**Conclusion**: When the underlying assumptions of the report are examined carefully, Statement 2 is strongly contradicted by the evidence.

# Statement 3. Three quarters of these applicants file one innovation patent and then never file another innovation or standard patent again.

It is not clear whether the data underlying this assertion was derived from the IP Government Open Data, in which case the data is too unreliable to reach a conclusion, or from more reliable data not available to the public. In any event, as indicated above in relation to Statements 1 and 2, this is an entirely expected course of action for innovation patent applicants. Further, it is not uncommon for a first application to be filed in an individual's name. If successful, that applicant is likely to incorporate and file new Innovation Patent

applications or standard patent applications in the name of the new corporate entity. The Economic Report does not recognise this common commercial practice.

We believe that a more accurate conclusion to be drawn from this data is that applicants who are otherwise priced out of filing patent applications are being attracted to the innovation patent system – exactly what the innovation patent system was established to achieve.

Statement 4. Only 23 SMEs have become moderate users of the innovation patent system, filing at least 5 innovation patents, with at least one enforceable right, and entering the patent system via an application for an innovation patent. The average SME or private inventor files once and never again (74%) does not receive any enforceable right (83%), and lets their patent expire early because they see its value at less than the \$110-\$220 cost of renewal (78%).

It is not clear why the authors of the Economic Report chose these criteria for determining what constitutes a "moderate user of the innovation patent system". Assuming the data is correct, there does not appear to be anything surprising about it.

The report's notion of "enforceable right" is misleading. The very nature of patent rights is that they are contingent rights, rather than absolute rights. While the process of examination may establish that some patent applications have no valid claims, it can never establish that a patent has valid and enforceable claims.

Unfortunately the IP Government Data relating to Innovation Patents incorrectly lists the status of most innovation patents revoked following examination as "LAPSED", rather than "REVOKED". However, from the available data it appears that approximately three quarters of innovation patents undergoing examination become certified and one quarter get revoked. Thus the process of examination and certification is not one of turning something unenforceable into an enforceable right, but merely a process of filtering out some obviously invalid patents.

The enforceability of a patent is determined by a court. Further research was conducted to determine the extent to which innovation patents have been the subject of Federal Court enforcement proceedings in recent years. A list of all Federal Court enforcement cases with a first-instance judgement issued between 1 January 2012 and 1 July 2015 was compiled. There were 34 cases on the list, of which 14 (41%) related to innovation patents and 20 related to standard patents only. 11 of the standard patent cases related to pharmaceutical litigation by major international drug companies, so if they are disregarded a majority of all general patent litigation related to innovation patents. 13 out of the 14 innovation patent cases related to patents owned by Australian companies, and in nearly every case the patent owner appears to have been an Australian SME.

If the value of a patent is ultimately determined by it becoming the subject of enforcement proceedings, the reported Federal Court cases from the past 3.5 years suggest that the innovation patent system is in fact more valuable to Australian SME patentees than the standard patent system.

	Total Litigated	Foreign Owner	Large Australian	SME Australian
Standard Patents	20	13	0	7
Innovation Patents	14	1	2	11

Table 8

As the above chart indicates, the standard patent is overwhelmingly the tool of choice of Foreign patent owners for enforcement proceedings in Australia, whereas the innovation patent is the tool of choice for Australian patent owners.

**Conclusion**: While the IP Government Open Data is too incomplete to determine whether Statement 4 is correct, recent Federal Court decisions suggest that innovation patents provide more enforceable rights for Australian patent owners than do standard patents.

Statement 5. The evidence shows that innovation patents have some positive effects, but in the one area of impact, firm survival, standard patents are found to have a bigger positive effect, and there is no effect from certifying innovation patents.

The IP Government Open Data is too incomplete to determine whether Statement 5 is correct.

Statement 6. Innovation patents impose a regulatory cost on Australian SMEs and private inventors of over \$10 million per year, equating to nearly 95% of the regulatory cost of the system. The maximum private value of the innovation patent system as a whole was calculated to be in the low tens of millions per annum.

As discussed in detail with reference to Statement 2 above, the regulatory cost estimated by the report is about three times the amount obtained by using more accurate assumptions, while the private value of the innovation patent system estimated by the report is very many times lower than what the data used actually suggests.

The suggestion that Australian SMEs and private inventors have "imposed" on them 95% of the regulatory cost of the system is not borne out by the data.

The data calculated with reference to Statement 2 above gives the following more accurate figures for filing regulatory costs borne by large firms, SMEs and private inventors respectively:

	Large		Private	
	Firms	SMEs	Inventors	Total
Filing Regulatory Costs	389880	1494120	1464678	3348678
Percentage	11.7	44.6	43.7	100
Percentage of				
Innovation Patents				
Granted	6	31	63	100

Table 9

Thus a more accurate calculation reveals that large firms pay 11.7% of the application costs for innovation patents but receive only 6% of the granted innovation patents, whereas private inventors receive 63% of granted innovation patents after bearing only 43.7% of the cost.

As discussed with reference to Statement 2 above, the regulatory costs associated with actions other than filing (renewal, examination and opposition) are borne by large firms to a more significant degree than those represented in the Economic Report.

**Conclusion**: When the underlying assumptions of the report are examined carefully, Statement 6 is strongly contradicted by the evidence.

Statement 7. Large firms tend to obtain the majority of this value from their innovation patents, followed by SMEs and private inventors. This highlights that the costs and

### benefits are not accruing evenly across firms.

As discussed above with regard to Statement 6, this statement is not supported by a more detailed consideration of the evidence. The following table compares the relative percentages of regulatory costs incurred by large firms, SMEs and private inventors with the relative percentages of innovation patents granted and innovation patents enforced according to Federal Court decisions issued between January 2012 and June 2015. Private inventors will almost always have formed an appropriate legal entity before undertaking litigation, so the figure for percentage of innovation patents enforced by SMEs should be regarded as a combination of the figures for SMEs and private inventors.

	Large Firms	SMEs	Private Inventors	Total
Percentage of regulatory costs				
incurred	11.7	44.6	43.7	100
Percentage of innovation patents				
granted	6	31	63	100
Percentage of innovation patents				
enforced	15	85	0	100

Table 10

As the table indicates, there is no statistically significant difference between the percentage of regulatory costs incurred and the percentage of innovation patents enforced by large firms as compared with SMEs and private inventors.

Unsurprisingly, this reflects that the amount invested into an innovation patent by an applicant is on average proportional to the value of that patent, and it is largely irrelevant whether the applicant is characterised as a large firm, and SME or a private inventor.

**Conclusion**: When the underlying assumptions of the report are examined carefully, Statement 7 is not supported by the evidence.

Statement 8. The low levels of repeated use by SMEs suggest that the innovation patent is not fulfilling its policy goal of providing an incentive for Australian SMEs to innovate, and the evidence shows a reduced likelihood of patenting after participating in the innovation patent system.

The IP Government Open Data is too incomplete to determine whether there is in fact a "low level of repeated use by SMEs". In any event it is unclear why the level of repeated use of the system would be at all relevant to the question of whether the innovation patent is providing an incentive for Australian SMEs to innovate. Single applications by a number of different applicants might indeed suggest that the innovation patent system is providing an excellent incentive for Australian SMEs to innovate.

The suggestion that "the evidence shows a reduced likelihood of patenting after participating in the innovation patent system" is incomprehensible without knowing what the innovation patent system is being compared to. The IP Government Open Data is too incomplete to enable verification of any such comparison. The comparison seems unlikely to be true if innovation patents are being compared with provisional applications, because, as discussed above in relation to Statement 1, a significant majority of provisional applications do not proceed any further. If innovation patents are being compared with standard patents, the comparison may well be true, but almost every Australian-owned standard patent application claims priority from a provisional application and is therefore not the first application filed by the applicant.

The comparison clearly is not true if innovation patent applicants are being compared with people who have never filed a patent application. As described above with regard to Statement 1, the likelihood of a business which has never previously filed a patent application participating in the patent system is about 1 in 1,000. The average number of additional innovation patents filed by an applicant who has previously filed one innovation patent application is 0.43 (based on very incomplete data).

**Conclusion**: When the underlying assumptions of the report are examined carefully, Statement 8 is not supported by the evidence.

Statement 9. Given the low private value of the system, it is likely that the system is a net cost to most of the SMEs that use it, and the system has imposed a regulatory burden of more than \$100m since its introduction.

The suggestion that "the system has imposed a regulatory burden of more than \$100m since its introduction" is based on the assumption that the system has an annual regulatory burden of more than \$11 million. As calculated above with regard to Statement 2, the current annual regulatory burden is more likely to be around \$4.3 million, based on more accurate figures. The system has been around for 14 years, but there were lower application numbers and lower costs in earlier years, so the total "regulatory burden" is likely to have been no more than \$50 million.

**Conclusion**: When the underlying assumptions of the report are examined carefully, Statement 9 is not supported by the evidence.

### **Economic Consequences of Abolishing Innovation Patents**

While the report is clearly slanted in favour of abolishing innovation patents, no consideration is given to evaluating the regulatory costs which would be imposed on patent applicants if the innovation patent system was abolished.

	Foreign Owner	Large Australian	SME/Individual Australian
Innovation	4363	859	13242
Standard	314982	8888	25900
%			
Innovation	1.4	8.8	33.8

Table 11

The above table shows the number of each type of patent application filed by foreign applicants, large Australian companies and Australian SMEs or individuals, for the years 2001 to 2014, according to the data in IP Government Open Data table 102. As can be seen from the data, 33.8% of all Australian complete patent applications filed by Australian SMEs or private individuals were innovation patent applications. Australian SMEs and private individuals would be the biggest losers by a long way if the innovation patent system was abolished.

If the innovation patent system was abolished, the more-than-one-third of complete applications currently being filed by SMEs and private individuals as innovation patent applications would be either filed as standard patent applications or not filed at all. Applicants choosing to file standard patent applications instead of innovation patent applications would be faced with the substantially higher regulatory costs associated with standard applications. Applicants unable to afford those higher costs would be discouraged from using the patent system altogether.

If the system was abolished, apart from the adverse economic impact on current patent applicants, there would also be an adverse impact on the broader economy by virtue of various innovations that would ordinarily be published through the innovation patent system, and thus made available to increase the body of knowledge available to the public, instead being retained confidential. In the absence of an innovation patent system, and the incentive for SMEs to innovate provided thereby, various innovations also simply would not come into existence as SMEs and private individuals would not as likely be willing to invest, or be able to attract investment, to develop their innovations in the absence of the availability of innovation patent protection. The broader economy would thus not enjoy the benefit of such innovations, and the associated products and services relating to such innovations.

## 6.0 Modifications to the Innovation Patent System recommended by both IPTA and FICPI Australia

Both IPTA and FICPI Australia accept that one disadvantage of the current Innovation Patent System is that granted rights can remain unexamined leaving third party uncertainty as to the likely scope of any certified rights.

The Economic Report fails to recognise that third parties currently have the right to request examination of an innovation patent (see section 101A). However, both IPTA and FICPI Australia recognise that this provision is rarely used. We have previously recommended that Government consider amendments to the system which would require a request for examination within a prescribed time following grant. We continue to believe that this would address the concerns raised in the Economic Report regarding the cost to SMEs pertaining to uncertainty surrounding uncertified grants.

Both IPTA and FICPI Australia continue to be concerned that the Innovation Patent System confers rights which in many ways are more valuable than rights conferred by a standard patent. An innovation patent is easier to secure, it is more difficult to revoke and the system provides flexibilities which are not available under the standard patent system. Both IPTA and FICPI Australia consider that the test for innovative step for the Innovation Patent should be amended, as the current test is little more than a novelty test. Options include:

- i) introducing an inventive step requirement similar to that which existed under the law prior to 1991 for standard patents (3M v Beiersdorf Inventive in the light of the common general knowledge in Australia); or
- ii) requiring that the contribution which is made is not simply to the working of the thing, but rather a contribution by reference to the prior art.

Copies of our previous submissions with respect to these issues form Annexure 3.

#### 7.0 Conclusion

The Innovation Patent System remains a vital part of the economic framework to develop and enhance innovation in this country. Abolition of the system would be perceived as an attack on innovation – particularly if the only alternative remaining was the higher cost right under the standard patent system. Both IPTA and FICPI Australia urge the Government to retain the Innovation Patent System whilst reconsidering the current requirements for certification and validity.

Representatives of both IPTA and FICPI Australia are available to discuss these issues if it would be of assistance.

Both IPTA and FICPI Australia acknowledge the assistance afforded by Mr. John Gibbs, in the preparation of these submissions.

Yours faithfully

Stephen Krouzecky

President FICPI Australia

Jeremy Dobbin President IPTA