# PATENT OPPOSITIONS IN AUSTRALIA: THE FACTS

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## I INTRODUCTION

#### A Background

Patent opposition in Australia is an administrative process within the Patent Office, whereby third parties, such as competitors, suppliers, or customers of the patentee, raise arguments and provide evidence against the validity of a patent that has been accepted, but not yet granted.<sup>1</sup> As such, it can potentially play an important role in maintaining the quality of the patent register. As a number of economists and legal scholars have pointed out, it is impossible for patent offices to find all the prior art relevant to a patent, particularly where that prior art lies outside the patent literature. Competitors and other outsiders, however, are likely to have information relevant to the validity of the patent, because they are active in the technology.<sup>2</sup> If these 'outsiders' can be encouraged to bring that information to the attention of the Patent Office, the examiners will be in a better position to make the right decisions about granting patents.<sup>3</sup> At the same time,

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<sup>1</sup> Patents Act 1990 (Cth) ch 5 ('Patents Act').

<sup>2</sup> Robert P Merges, 'As Many as Six Impossible Patents Before Breakfast: Property Rights for Business Concepts and Patent System Reform' (1999) 14 *Berkeley Technology Law Journal* 577, 614–5; Joseph Farrell and Robert P Merges, 'Incentives to Challenge and Defend Patents: Why Litigation Won't Reliably Fix Patent Office Errors and Why Administrative Patent Review Might Help' (2004) 19 *Berkeley Technology Law Journal* 943, 964; Jonathan Levin and Richard Levin, 'Patent Oppositions' (Working Paper No 245, John M Olin Program in Law and Economics at Stanford University, 2002) 23.

<sup>3</sup> Merges, above n 2, 614–5, Levin and Levin, above n 2, 23.

there are potential benefits, especially for smaller businesses, to having a low cost mechanism for challenging the validity of patent applications, particularly in an era where increasing burdens on patent offices are raising questions about the quality of the patents being granted.<sup>4</sup>

The Australian Federal Court has expressed the basic objectives of the patent opposition system in terms that are broadly consistent with this economic and legal theory. According to the Federal Court, the opposition system has at least two objectives. The first is 'ensuring that bad patents do not proceed to grant'.<sup>5</sup> This objective may be re-expressed as ensuring that overly broad patent claims do not proceed to grant; that is, to ensure that granted patent claims are limited to those that define the invention (this includes complete invalidation where there is no patentable invention for one reason or another). We call this the objective of providing an effective mechanism to preclude imprudent grant. The second objective recognised by the Federal Court is that this mechanism should have greater efficiency than curial alternatives. According to the Court, the 'purpose of pre-grant opposition proceedings is to provide a swift and economical means of settling disputes that would otherwise need to be dealt with by the courts in more expensive and time consuming post-grant litigation'.<sup>6</sup> For the purposes of this study we refer to this as the objective of providing an efficient alternative to revocation.

The Australian patent opposition system is different from others. Worldwide there has been a move towards post-grant opposition, on the grounds, among others, that pre-grant opposition allowed third parties to harass patent owners and delay patent grant.<sup>7</sup> Indeed, perhaps on this basis, the United States has actually included in many of its bilateral Free Trade Agreements a provision requiring

<sup>4</sup> William Kingston, 'Innovation Needs Patents Reform,' (2001) 30 Research Policy 403, 410; Merges, above n 2, 615; Federal Trade Commission (US), To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy (2003) 18–22; Stuart J H Graham et al, 'Post-Issue Patent Quality Control: A Comparison of US Patent Re-examinations and European Patent Oppositions', in Wesley M Cohen and Stephen A Merrill (eds), Patents in the Knowledge-Based Economy (National Academies Press, 2003) 75.

<sup>5</sup> Genetics Institute Inc v Kirin-Amgen Inc (1999) 92 FCR 106, 112.

<sup>6</sup> Ibid.

<sup>7</sup> Delay was given as one of the key reasons for the abolition of pre-grant opposition via the 1977 Patents Act: see Board of Trade (UK), The British Patent System: Report of the Committee to Examine the Patent System and Patent Law, Cmnd 4407 (1970) 34. Japan replaced pre-grant with post-grant opposition effective 1 January 1996; China in 1992, and Taiwan in 2004: in each country, pre-grant opposition was criticised as being subject to abuse by large corporations that hampered patent applications by smaller companies through protracted oppositions: Haitao Sun, 'Post-Grant Patent Invalidation in China and the United States ('US'), Europe, and Japan: A Comparative Study' (2004) 15 Fordham Intellectual Property Media & Entertainment Law Journal 273, 286, 296–8; Dale L Carlson and Robert A Migliorini, 'Patent Reform at the Crossroads: Experience in the Far East with Oppositions Suggests an Alternative Approach for the United States' (2006) 7 North Carolina Journal of Law & Technology 261, 295–9. See also Industrial Property Advisory Committee (Cth), Patents, Innovation and Competition in Australia 63; Federal Trade Commission (US), above n 4, 8, 18. New Zealand is considering repealing pre-grant opposition provisions: Patents Bill 2008 (NZ) (at the time of writing, this bill was pending in the New Zealand Parliament).

any opposition to be exclusively post-grant.<sup>8</sup> Australia, however, retains the older pre-grant system: that is, a third party has three months following acceptance by the Patent Office to file an opposition; absent such filing, the patent proceeds to grant.<sup>9</sup>

Patent law reform bodies over time have discussed whether the Australian system should be redesigned. In 1984, the Industrial Property Advisory Committee ('IPAC') found that opposition was costly, that it was commonly used by competitors to delay grant, and that 'opposition proceedings may have the effect of enabling competitors to pirate the invention and to compete with the inventor directly'.<sup>10</sup> Not surprisingly, IPAC recommended its abolition - a recommendation that was not, however, adopted in the Patents Act. The issue was considered again in 1999, when the Advisory Council on Intellectual Property ('ACIP') again suggested replacing pre-grant with post-grant opposition due to the potential for abuse. However, owing to the absence of support from the profession and industry, their final report did not proceed with that recommendation.<sup>11</sup> Shortly after, in 2000, the Intellectual Property and Competition Review Committee accepted the status quo and focussed instead on who should conduct hearings.<sup>12</sup> More recently, in June 2009, IP Australia issued a consultation paper, Resolving Patent Opposition Proceedings Faster, which proposed administrative changes to reduce the delays caused by patent oppositions, mostly by reducing periods allowed for certain steps such as the filing of grounds and evidence, and limiting the availability of extensions of time.<sup>13</sup> At the same time, ACIP in its review of Post-Grant Patent Enforcement Strategies again asked whether opposition in Australia should move to postgrant, citing issues of delay caused by 'repeated requests for extension of time'.<sup>14</sup>

<sup>8</sup> See, eg, US-Singapore Free Trade Agreement, signed 6 May 2003 (entered into force 1 January 2004), art 16.7.4; US-Bahrain Free Trade Agreement, signed 14 September 2004; (entered into force 1 August 2006), art 14.8.4. See also US-Republic of South Korea Free Trade Agreement, signed 30 June 2007 (not yet in force), art 18.8.4. Interestingly this provision does not find its way into all the US bilateral agreements: it is not found in the US-Chile Free Trade Agreement, signed 6 June 2003 (entered into force 1 January 2004); US-Morocco Free Trade Agreement, signed 15 June 2004 (entered into force 1 January 2006), or US-CAFT-DR Free Trade Agreement, signed 28 May 2004 (entered into force 1 March 2006 (El Salvador), 1 April 2006 (Honduras and Nicaragua), 1 July 2006 (Guatemala), 1 March 2007 (Dominican Republic)). For present purposes, it is not found in the Australian agreement either: US-Australia Free Trade Agreement, signed 18 May 2004, 43 ILM 1248 (entered into force 1 January 2005).

<sup>9</sup> Patents Act 1990 (Cth) s 59; Patent Regulations 1991 (Cth) reg 5.3(1).

<sup>10</sup> IPAC, above n 7, 64.

<sup>11</sup> See ACIP (Cth), *Review of Enforcement of Industrial Property Rights* (1999) 24 for a discussion of the proposal and the response from the profession.

<sup>12</sup> Intellectual Property and Competition Review Committee, *Review of Intellectual Property Legislation* under the Competition Principles Agreement (Commonwealth of Australia, 2000) 171–175.

<sup>13</sup> IP Australia (Cth) ('IP Australia'), Resolving Patent Opposition Proceedings Faster (Consultation Paper, June 2009) ('Resolving Patent Opposition Proceedings Faster'). The proposals in this Consultation Paper were largely affirmed by IP Australia in a paper summarising submissions made to it and responses in November 2009: IP Australia, Toward a Stronger and More Efficient IP Rights System (Consultation Paper, November 2009) 19–26 [90]–[118] ('November 2009 Consultation Paper').

<sup>14</sup> ACIP (Cth), Post-Grant Patent Enforcement Strategies Issues Paper (2006) 13.

ACIP's Final Report arising from this review, published in January 2010, made no final recommendations for change, based on the absence of any evidence that switching to post-grant opposition would address concerns. ACIP also noted mixed views within the profession, and listed a series of concerns about a shift to post-grant opposition, including the potential impact on first-time patent applicants (who, having had their patent application accepted, may believe they have a granted patent, only to discover it is opposed); and the impact on the balance of rights and interests under the *Patents Act*.<sup>15</sup> At the time of writing, a draft bill has been circulated by IP Australia for comment, the Intellectual Property Laws Amendment (Raising the Bar) Bill 2011, proposes to implement many of IP Australia's 2009 proposals; some reference will be made to these proposals in the text below.

This history illustrates the continual worrying over the patent opposition system in Australia. Again and again, governments and advisory bodies have worried over the potential impact of pre-grant opposition on both patent applicants and their competitors, and considered its abolition. As the decision in *Genetics Institute Inc v Kirin-Amgen Inc* illustrates, the relationship between this administrative process and curial processes (such as revocation) is fraught, owing to the tension between the desire to render the 'right' result, and the desire to provide decisions as quickly, simply, and efficiently as possible. As ACIP noted in its January 2010 report, there are simply not enough facts to permit evidence-based recommendations for reform of the Australian patent opposition procedure. While quantitative studies have been undertaken of the European and the US systems, no equivalent study exists of the Australian procedure. Thus, we have only limited information in relation to key issues such as how much the procedure is used, how long it takes, and what outcomes it produces. Accurate data are important to assessing the effectiveness of the procedure.

This study also contributes to a broader academic debate over the efficiency and effectiveness of merits review of administrative decisions, both in patent specifically,<sup>16</sup> and more generally.<sup>17</sup> Although the existence of merits review in patent law is somewhat anomalous,<sup>18</sup> it nevertheless prompts examination of assumptions about the differences between administrative and curial forms of review.

<sup>15</sup> ACIP (Cth), Review of Post-Grant Patent Enforcement Strategies – Final Report (2010) 55–56; see also ACIP (Cth), Post-Grant Patent Enforcement Strategies: Interim Report (August 2009) 56–60.

<sup>16</sup> See generally Charles Lawson, 'Revisiting Merits Review of Patent Application, Grant and Validity Decisions under the Patents Act 1990 (Cth)' (2007) 14 Australian Journal of Administrative Law 178; Administrative Review Council (Cth), Report to the Attorney-General: Administrative Review of Patents Decisions (1998); Chris Dent, 'Patents as Administrative Acts: Patent Decisions for Administrative Review?' (2008) 30 Sydney Law Review 691.

<sup>17</sup> See, eg, Robin Creyke, 'Where do Tribunals Fit into the Australian System of Administration and Adjudication?' in Grant Huscroft and Michael Taggart (eds), *Inside and Outside Canadian Administrative Law: Essays in Honour of David Mullan* (Toronto University Press, 2006) 81; Peter Cane, 'Merits Review and Judicial Review – the AAT as Trojan Horse' (2000) 28 *Federal Law Review* 213.

<sup>18</sup> Lawson, above n 16; Dent, above n 16.

#### **B** Aims

Our study has two aims. The first aim is to produce detailed data on the use of the Australian patent opposition system over time. To that end, we have, with the assistance of IP Australia, constructed a detailed database of all patent oppositions filed with IP Australia in the period 1986–2006, and report here a range of descriptive statistics concerning these oppositions. The second aim of our study is to use this data to comment on the extent to which the Australian patent opposition system is meeting its purported objectives, by considering what, if anything, the data says about the ability of the system to provide an effective means to preclude the imprudent grant of patents, and to provide an efficient alternative to revocation. We conclude with some observations on the policy implications of our findings.

### C Methodology

The study reported here examines the population of all Australian patent applications filed 1980–2005 for which an opposition was filed in the period 1986–2006: a total of 2361 patent applications. The initial list was generated by IP Australia from its internal databases.<sup>19</sup> This basic data was supplemented with information gained from reading every opposition decision with reasons delivered in the period 1986–2007 and published online by AustLII.<sup>20</sup>

There are some important limitations to the data. First, there are many factors we do not record and cannot control for: inter alia, the quality of the registered IP rights, the financial resources of the parties, the skill of legal representatives and expert witnesses, strategic choices made by the parties in how they run their cases, and what arguments they make. Collecting this type of data would be extremely difficult, if not impossible. Only data that we could code consistently, simply, and in a replicable way, was collected.<sup>21</sup> Such an approach enables consistent comparisons, although it does, of course, risk glossing over nuances in the decision-making and results. Second, for the large proportion of oppositions where no decision was published on AustLII, we have only limited information.

<sup>19</sup> The Patent Administration system ('PATADMIN') is a mainframe system which contains bibliographic data on patents filed between 1979 and 2000. It records a range of basic bibliographic data about the relevant patents: (<http://www.ipaustralia.gov.au/patents/search\_patadmin.shtml>). The Patent Administration and Management System ('PAMS') contains similar information for patents filed from 2001, and contains more extensive information. IP Australia does now allow for considerably more online searching of patents via the AUSPAT facility (<http://www.ipaustralia.gov.au/auspat/>). This database was not online at the time that the data for this study was collected.

<sup>20</sup> The AustLII database ( <http://www.austlii.edu.au>) may not be a complete record of all decisions rendered, particularly in early years. However, it is by far the most complete record we have. We have no way of knowing how many decisions may have been missed; this must therefore be noted as a general caveat on the results reported below.

<sup>21</sup> A number of further techniques were adopted to maximise the reliability and replicability of the data collected: eg the use of standard forms and guidelines for the person reading the decisions and double-reading in the case of uncertainty. The methods used here are broadly consistent with those used previously in Kimberlee G Weatherall and Paul H Jensen, 'An Empirical Investigation into Patent Enforcement in Australian Courts' (2005) 33 *Federal Law Review* 239.

In particular, if the patent ended up being sealed, we have no way of ascertaining whether the applicant voluntarily filed amendments or the opposition was withdrawn without such amendment.<sup>22</sup> Third, we did not look at appeals from oppositions to the Federal Court or appeals on procedural questions to the Administrative Appeals Tribunal.<sup>23</sup> These and other limitations to the data are discussed below as we present the results of our analyses.

# **II RESULTS**

## **A** Frequency of Use of the Opposition Procedure

If we want to know more facts about oppositions, the first thing we need to know is how common they are. In this part of our results, we analyse patent applications filed and opposed, based on the year in which the complete application was filed.<sup>24</sup> We have chosen a date range of complete patent specifications filed between 1985 and 2000, on the basis that the overwhelming majority of oppositions to patents in this date range will have been filed by 2006.<sup>25</sup> We report how frequently patent applications are opposed, and whether there are differences in the frequency of opposition depending on the technology of the invention and the country of origin of the patent application.

## **1** Opposition Frequency over Time

Figure 1 shows the number, and the proportion, of patent applications filed between 1985–2000 for which at least one opposition was filed.

<sup>22</sup> The Patent Office is not required to issue a decision with reasons where amendments are accepted during the course of examination and there is no opposition to those amendments.

<sup>23</sup> The applicant and any opponent may appeal to the Federal Court against a decision of a Commissioner: Patents Act 1990 (Cth) s 60. In addition, a person 'whose interests are affected by the decision' (Administrative Appeals Tribunal Act 1975 (Cth) s 27(1)) may request review of certain (largely procedural) decisions by the Administrative Appeals Tribunal: Patents Act 1990 (Cth) s 224; Patents Regulations 1991 (Cth) reg 22.26.

<sup>24</sup> An alternative would be to categorise the 'opposition rate' by the year the opposition was filed. The main reason for categorising oppositions by the year of application for the patent is that it allows us to draw comparisons with the population of patent applications in the same year. A further (equally valid) alternative would be to compare oppositions with *accepted* patent applications. However, we have used patent *applications* rather than *acceptances* because we think that these statistics are more likely to be of interest to a person at the point where they are considering applying for a patent, and for general consistency with the usual way of reporting patent statistics. World Intellectual Property Organisation patent statistics, for example, refer to applications in the first instance, rather than acceptances: see, eg, World Intellectual Property Organization, *World Intellectual Property Indicators 2010* (2010) <a href="http://www.wipo.int/export/sites/www/ipstats/en/statistics/patents/pdf/941">http://www.wipo.int/export/sites/www/ipstats/en/statistics/patents/pdf/941</a> 2010.pdf>.

<sup>25</sup> Based on the information in the Intellectual Property Research Institute of Australia Opposition Database, the mean delay between the filing of a complete specification and the filing of an opposition is 1164 days (3.19 years).



Figure 1: Number and proportion of patent applications opposed, 1985–2000

The overall average opposition rate for this period was 0.8 per cent. These data show the trends over time in Australia for filing oppositions. The graph suggests an overall rise in both the number and proportion of applications opposed up to around 1994, followed by a continuing rise in the absolute number of oppositions but a decline in the proportion of patents opposed between 1994 and 1998, and a decline in both for 1999 and 2000.

#### 2 Frequency by Technology Group

Table 1 presents an analysis of the (main) technology classes of patents applied for during the period 1985–2000, and the number and proportion of patents in these classes that have been opposed, using the OST-IPC technology concordance.<sup>26</sup> Table 1 is ranked, starting from the class with the most frequent oppositions (relative to the number of applications). The last two columns represent alternative ways to conceptualise the 'opposition rate' for each technology class. The penultimate column compares the proportion of oppositions relating to a particular technology class to the proportion of patent applications in that class. A numerical result of 1.0 here would show that there are the same proportion of oppositions in a class as there are applications in that class; a number greater than 1.0 indicates the technology class is overrepresented in the opposition procedure, and a number less than 1.0 shows the

<sup>26</sup> OST refers to the UK Office of Science and Technology classification. IPC is the International Patent Classification. The OST concordance gives a smaller, more manageable set of 30 technology categories more clearly related to conventional industry classifications. Classification into an OST technology class depends on the main IPC classification of the patent application.

technology class is under-represented. The last column represents a different way of conceiving the same thing, by indicating the number of patents in the technology class for every opposition filed. Thus for materials and metallurgy, one opposition is filed for every 52.37 patents in the period studied; in nuclear engineering, 119.67 patents are filed for every patent opposed.

Technology Group	No. of pat. apps <sup>28</sup>	Prop. of all apps in this class (%)	No. of pat. apps opposed	Prop. of all opps (%)	Prop. of opps vs prop. of apps	No. of pat apps for each opp. filed
Materials, metallurgy	6651	2.74	127	6.14	2.24	52.37
Surfaces, coatings	4170	1.72	73	3.53	2.05	57.12
Space technology, weapons	1117	0.46	19	0.92	1.99	58.79
Civil engineering, building, mining	12 289	5.07	171	8.27	1.63	71.87
Basic chemical processing, petrol	8152	3.36	100	4.84	1.44	81.52
Biotechnology	10 419	4.30	121	5.85	1.36	86.10
Pharmaceuticals, cosmetics	18 716	7.72	211	10.20	1.32	88.70
Material processing	8307	3.43	87	4.21	1.23	95.48
Electrical devices & engineering	7549	3.11	77	3.72	1.20	98.03
Environment, pollution	1971	0.81	20	0.97	1.19	98.55
Agriculture, food	5639	2.33	57	2.76	1.19	98.93
Agricultural & food machinery	5304	2.19	51	2.47	1.13	104.00
General processes	10 044	4.14	88	4.26	1.03	114.14

# Table 1: Patent applications and oppositions by technology class, 1985-2000<sup>27</sup>

<sup>27</sup> The date used for both applications and oppositions is the date of the filing of the complete specification. Thus, applications in a given year comprise non-Patent Cooperation Treaty ('PCT') applications filed in that year, plus PCT applications that entered the national phase that year.

<sup>28</sup> These data were provided by IP Australia.

Total: Sources: IP Australia	242 456	100	2068	100	n/a	n/a
Misc, not yet classified	4116	1.70	0	0	n/a	n/a
Mechanical elements	6578	2.71	29	1.40	0.52	226.83
Transport	7989	3.30	40	1.93	0.59	199.73
Medical engineering	15 480	6.38	78	3.77	0.59	198.46
Organic fine chemicals	18 834	7.77	95	4.59	0.59	198.25
Telecommunications	12 957	5.34	70	3.38	0.63	185.10
Macromolecular chemistry, polymers	8696	3.59	49	2.37	0.66	177.47
Semiconductors	803	0.33	5	0.24	0.73	160.60
Optics	5079	2.09	32	1.55	0.74	158.72
Audiovisual	3011	1.24	19	0.92	0.74	158.47
Engines, pumps, turbines	3421	1.41	22	1.06	0.75	155.50
nformation echnology	5641	2.33	38	1.84	0.79	148.45
Handling, printing	12 476	5.15	93	4.50	0.87	134.15
Analysis, measurement, control	15 239	6.29	115	5.56	0.88	132.51
Consumer goods & equipment	13 489	5.56	110	5.32	0.96	122.63
Thermal techniques	3243	1.34	27	1.31	0.98	120.11
Nuclear engineering	359	0.15	3	0.15	0.98	119.67

Sources: IP Australia Patent Statistics and IPRIA Opposition Database

We can draw a number of observations from Table 1. First, in absolute number terms, it would seem that use of the Australian patent opposition system is dominated by oppositions to patent applications in pharmaceuticals (at 10.20 per cent of all oppositions) and civil engineering, building and mining (8.27 per cent); with patent applications in the fields of materials, metallurgy and biotechnology also quite actively opposed, at 6.14 and 5.85 per cent, respectively. These technology classes also represent a significant proportion of patent applications overall: together these four classes represent 20 per cent of all patent applications. It is worth noting, however, that some areas of technology where there are many patent applications have relatively few oppositions: for example, organic fine chemicals (7.77 per cent of patent applications but only 4.59 per cent of oppositions) and medical engineering (6.38 per cent of patent applications but only 3.77 per cent of oppositions).

More interesting are the results in the last two columns, which indicate whether a particular technology area is generating a disproportionate number of oppositions. As Table 1 shows, materials and metallurgy; surfaces and coatings; space technology and weapons; civil engineering, building, and mining; and basic chemical processing are all over-represented in patent oppositions.<sup>29</sup>

At the other end of the spectrum we have transport (one opposition for every 200 patents), and semiconductors (one opposition for every 161 patents). The latter is consistent with international studies that indicate that competitors in the semiconductor industry have other ways of dealing with patent conflicts, such as cross-licensing.<sup>30</sup> Given current controversies over patents in the ICT field, in particular, software and related patents,<sup>31</sup> it is interesting to see that this field is somewhat under-represented.

# 3 Frequency by Country of Origin

Another issue of interest is the country of origin of the patent applications that are opposed.

Figure 2 shows the top six countries of origin of patents opposed in Australia.

<sup>29</sup> The ranking of 'space and weapons' in the top five is interesting, but there are a relatively small number of patents filed in this area; it also seems likely that there are a relatively small number of players in this market, who are likely to monitor each others' patenting.

<sup>30</sup> Bronwyn H Hall and Rosemarie Ham Ziedonis, 'The Patent Paradox Revisited: An Empirical Study of Patenting in the US Semiconductor Industry, 1979–1995' (2001) 32 *The RAND Journal of Economics* 101. A similar story may explain our result in medical engineering (one opposition for every 198 patents, as shown in Table 1).

<sup>31</sup> See, eg, the considerable controversy arising over the case and decision in *Bilski v Kappos*, 561 US \_\_\_\_\_ (2010); 130 S Ct 3218 (2010). In relation to Australia, see ACIP (Cth), *Patentable Subject Matter: Final Report* (Commonwealth of Australia, 2010), 36–37ff.





Figure 2 illustrates that patent applications originating in Australia are frequently opposed, although a majority of opposed applications originate overseas. Overall, 32 per cent (or 658 applications) of all opposed patent applications in the period 1985–2000 had Australia as their country of origin; 68 per cent (1405) originated in other countries. It is logical that a majority of patents opposed will originate overseas given that an overwhelming majority – some 89 per cent – of applications in the period studied originate from countries other than Australia.<sup>32</sup> That said, applications from Australia were, proportionally, the most opposed applications: 2.4 per cent of Australian applications (or 40 applications) were subject to opposition proceedings: more than twice the average rate of 0.85 per cent.<sup>33</sup>

33 See discussion under Figure 1, above.

<sup>32</sup> The sharp-eyed reader will note that these figures do not add up to the 2,068 oppositions in our database, but to 2063. The discrepancy is owing to missing country data for the patent applications in the other five oppositions not included in the figure.

In raw numbers, patents originating from the US have generated the largest number of oppositions (707 of 1405 opposed applications that had a foreign country as the country of origin). However, as a *proportion* of all patent applications from a given country, it is the United Kingdom, Canada, and New Zealand which are overrepresented: suggesting a 'Commonwealth effect'. It is not immediately obvious to us why firms using oppositions in Australia would be most focussed on patents from these countries, rather than, say, China or Japan.

That applications originating in New Zealand generate oppositions at a rate second only to Australia (at 1.8 per cent) suggests that the geographical proximity to, and/or integration of the markets of the country of origin of a patent with, the Australian market is relevant to the likelihood of the patent being opposed in Australia. The Australian and New Zealand economies are closely integrated as a result of the comprehensive and long-standing free trade agreements that exist between the two countries.<sup>34</sup> It seems reasonable to suppose that patents originating from New Zealand are more likely to be of commercial significance to Australian firms than are patents from many other countries, because New Zealand firms are more likely to be competing actively in the Australian market place than are firms from many other countries. Thus, it would be expected that patents originating from New Zealand are more likely to be opposed in Australia than are patents originating from New Zealand are more likely to be opposed.

## **B** Duration, Delay and Settlement

The next set of results that we report relate to duration of the opposition procedure: how long does it take for an opposition to be resolved, how long does it take for a merits decision to be obtained, and how frequently do oppositions settle? It is worth noting that the data reported here relate to a differently constituted population of patents: those patents against which oppositions were filed between 1986–2002.<sup>35</sup>

#### 1 Delay to Grant Caused by Opposition

The first, and perhaps most important, question where information would be helpful is the extent of delay in the sealing of patents caused by having a pregrant opposition process. We can define 'delay' as the period of time from the end of the 3-month opposition period, when a non-opposed patent would

<sup>34</sup> Australia-New Zealand Closer Economic Relations Trade Agreement, signed 28 March 1983 [1983] ATS 2 (entered into force 1 January 1983), replacing the New Zealand-Australia Free Trade Agreement, signed 31 August 1965, [1966] ATS 1 (entered into force 1 January 1966).

<sup>35</sup> In the previous section grouping the patents by date of filing of the application enabled us to make comparisons with the whole population of patent applications. In this section, we are concerned exclusively with oppositions; it therefore makes more sense to group oppositions by the year of their filing. We have data on decisions rendered up to the end of 2006, and so have limited our analysis in this section to oppositions filed up to the end of 2002 – providing a four-year time lag for a decision on it to be rendered. Note that roughly 80 per cent of patents that proceed to sealing will have been sealed within four years of the filing of an opposition. We are not aware of any reason to suggest that a comparison of these differently constituted populations would be problematic.

ordinarily seal, to the date on which the opposed patent is finally sealed. This delay is illustrated graphically in Figure 3. Those cases where IP Australia has issued a merits decision are shown in the lighter areas.





Three aspects of the information in Figure 3 may be noted. First, oppositions that do not result in a merits decision are finalised in a significantly shorter timeframe than oppositions that include a merits decision. Fifty per cent of oppositions that do not include a decision on the merits of the opposition are completed within 1.5 years of the filing of the opposition, whereas it takes 4.5 years from filing opposition to finalise 50 per cent of oppositions where there is a decision on the merits. This is not surprising, given the time-consuming documentary requirements of the opposition process.<sup>36</sup> Only once these documents have been filed is a hearing date set; which, inevitably, is some time (generally some months) thereafter. Furthermore, it takes some time from the hearing of an opposition to the issuing of a decision. This makes it unlikely that a

<sup>36</sup> Prior to a hearing, the opponent has to file a Statement of Grounds and Evidence in Support; the patent applicant then files Evidence in Answer; this is followed by the opponent filing Evidence in Reply. Currently, each of these filings has a three-month time-limit, though extensions of time are regularly sought and granted – discussed further in Part II(B)(3). These aspects of the system have been the subject of recent reform initiatives. Under amendments proposed by IP Australia in the November 2009 Consultation Paper, above n 13, 19–26, the opponent would need to provide particularised documents with their statement of grounds; the period for evidence in reply would be reduced to two months; and the Commissioner's power to allow extensions of time would be restricted. These proposals have not, however, made their way into the Intellectual Property Laws Amendment (Raising the Bar) Bill 2011.

merits decision will be rendered within less than two years of an opposition commencing.  $^{\rm 37}$ 

The second aspect of note is that some oppositions take a very long time to finalise. Twelve per cent of oppositions are still on foot after five years, and 1.2 per cent (18) of oppositions in the period studied were still going after nine years – with five of those not (yet) having had a hearing. We cannot ascertain, from the raw data, why these oppositions are so drawn-out; however, these extreme cases are not the typical experience.<sup>38</sup>

The final point is that, even putting aside the extreme cases, the filing of an opposition typically delays the sealing of a patent by a significant period. Overall, the mean number of days' delay is 865 days (2.4 years); the median is 656 days (1.8 years). A delay of this magnitude is significant to patent applicants, especially in the context of time already expired prior to examination.<sup>39</sup> Both the mean and the median times from filing of the specification to acceptance of the applications in our database are 1015 days (2.8 years);<sup>40</sup> add in the time for opposition and this is a significant delay before the patentee can take action to enforce any rights they might have.

37 As Figure 3 illustrates, however, there were six oppositions in our dataset where the patent was sealed less than two years after the date it normally would, and in which there was a merits decision. These particular cases however are notable for involving low-technology patents, confined issues and limited evidence: Ball Corporation v American National Can Company [1995] APO 4 (patent application for specific shape of aluminium can; no evidence in answer; evidence only relating to two statutory declarations attaching documents not shown to be publicly available); Michael Gordon Matthews v Anthony Mark Ingman [2000] APO 46 (patent application for surgical item (intramedullary nail)); opponent acting on own behalf citing documents not shown to be publicly available); Nicola Leonardis v John Wolfe Stalban [1992] APO 38 (patent application relating to foundation reinforcement support chairs; another opponent acting on own behalf; novelty only; with documents not shown to be publicly available; no evidence filed in answer); Kidde Fire Protection Limited v I E I Australia Pty Ltd [1995] APO 34 (patent application relating to particle detection; no evidence filed in answer; evidence in support relatively confined; inventive step and s 40 only raised); Orenco Systems, Inc v Everhard Industries Pty Ltd [1999] APO 68 (patent application for septic tank effluent filtering method; fair basing issue relating to apparent widening during amendment); Aristocrat Technologies Australia Pty Ltd v International Game Technology [2004] APO 2 (more complicated issues but two experienced parties).

- 38 It should be noted, however, that calculating 'delay' based on sealing date may overstate the delay when the *opposition* is finalised well before sealing. This may occur if there are issues relating to amendment. For example, the case involving the longest delay related to a patent with a serial number of 610381, relating to stain resistant polycarbonate panels. The application was filed in 1989, and accepted and opposed in 1991. A decision in the opposition was rendered in March 1997, allowing the applicant 60 days to propose amendments, which it did. The amendments were allowed a year later, in November 1998. But the patent was not finally sealed until March 2005. The database records this as a 'delay caused by opposition' of 5040 days (13.8 years). This is probably an unfair characterisation of a delay caused by events following the opposition. There is, unfortunately, no clear way to separate such cases, so we have allowed the characterisation to stand.
- 39 It should be noted that Australia applies deferred examination, that is, examination only occurs after the applicant requests it under the *Patents Act 1990* s 44. The majority of applicants wait until the Commissioner directs them to request examination under s 44(2). Thus most of this delay is within the control of the applicant. At the time of writing, the average examination time for patents in Australia was 11 months: IP Australia, 'Patents Examination Time Slashed!' (Media Release, 24 February 2011).

<sup>40</sup> This figure is for the specifications in the database filed between 1980–2000.

#### 2 How Long to a Merits Decision?

Delay from oppositions can come from both the parties themselves, and/or from the behaviour of IP Australia in its management of the patent opposition process. One matter of interest to policymakers is how efficiently IP Australia is managing the opposition process.<sup>41</sup> This can be explored by looking at the duration from filing of opposition to the hearing in those cases where the matter proceeds to a merits decision – although we recognise that even in these cases, delays may be caused by the parties, for example, seeking extensions of time. We are also interested in whether there have been changes over time in how long it takes for a merits decision to be made, which could indicate improvements or increased problems with IP Australia's processes.

Calculations based on our data<sup>42</sup> show that overall the median number of days between the filing of an opposition and the date of a merits decision is 1142 days (3.1 years), with an overall minimum of 167 days (0.5 years)<sup>43</sup> and a maximum of 3079 days (8.4 years).<sup>44</sup> The median and maximum periods over time are illustrated in Figure 4.

<sup>41</sup> For discussion about how IP Australia can 'speed up the process', see *Resolving Patent Opposition Proceedings Faster*, above n 13.

<sup>42</sup> A total of 385 oppositions filed in the period 1986–2002 resulted in a decision on the merits of the opposition.

<sup>43</sup> It may be noted that the decision that occurred 167 days after the filing of the opposition procedure, L'Air Liquide, Societe Anonyme Pour L'Etude Et L'Exploitation Des Procedes Georges Claude v The Commonwealth Industrial Gases Limited [1992] APO 1, may be characterised as an interlocutory decision – resulting from an application by the patent applicant to dismiss the opposition. However, because the hearings officer considered the merits of the opposition in this decision, we have characterised the decision as a merits decision.

<sup>44</sup> Mars UK Limited v Merck & Co, Inc [1997] APO 22. The patent application 51312/85, relating to gels that are suitable for use in food products, was lodged on 13 December 1985 by Mars G B Limited, claiming priority from an earlier UK application (No 8431699 filed 14 December 1984); it was accepted on 22 September 1988 and on 22 December 1988 a notice of opposition was lodged by Merck & Co., Inc. Just over half of this delay arose in the evidence stage; service of evidence was not completed until 8 July 1994; but even then there was no hearing until October 1996 – in part because, in the meantime, the applicant filed amendments to the patent (unopposed). Making the decision also took some time: 217 days, which is longer than 85 per cent of the proceedings for which we have observations. Note that this means a decision in the opposition – leading to grant – occurred just under 12 years after the patent was filed in Australia.



Figure 4: Median and maximum period from filing of opposition to merits decision, by year of filing of opposition, 1986–2002

The data illustrated in Figure 4 show that the median duration from filing to merits decision generally decreased from 1986 (1393 days) to 1993 (832 days), but then generally increased thereafter to 2002 (1361 days), so that by the end of the period it was at the same level as at the start of the period.<sup>45</sup> This pattern is, essentially, the inverse of the pattern of the proportion of oppositions filed in the period, as shown in Figure 1. Perhaps not surprisingly, therefore, it would seem that the more intensive the overall opposition rate (ie number of oppositions filed as a proportion of all applications filed), the longer it takes for opposed applications to receive a merits decision.<sup>46</sup>

For the sake of completeness, we also calculated the mean and median times between the date of an opposition hearing<sup>47</sup> and the rendering of a decision on the merits. This is, perhaps, a clearer measure of IP Australia's efficiency, as it is more within the control of IP Australia. We appreciate that even this may not be

<sup>45</sup> While not depicted on the figure for reasons of clarity, we also calculated the maximum duration over time. Here, the trend over time was a decrease in duration, albeit certainly not a smooth decrease. At the start of the period (1986–1988), the maximum duration averaged just over 2800 days. At the end of the period (2000–2002), the maximum duration had fallen by 30 per cent, to just under 2000 days.

<sup>46</sup> This may suggest that IP Australia's oppositions-hearing infrastructure is not sufficiently scalable to rapidly accommodate increases and decreases in the rate of opposition filing.

<sup>47</sup> Hearing dates are usually reported in the decisions. In cases where there was no hearing (which occurs where neither party wishes to be represented), we have used the date at which IP Australia notified the parties that the matter was to be set down for hearing; the date it was in fact set down for hearing, or the date on which the parties notified IP Australia that they would be relying on a decision without a hearing. If no such date is reported in the decision, the proceedings were excluded from this chart. If the hearing date given was a month, a date in the middle was used.

under IP Australia's control in all cases: for example, where leave is sought to make further submissions,<sup>48</sup> or where the hearings officer is waiting on a judicial decision to be handed down. Further, if the evidence is voluminous (which is a matter within the parties' hands), it is natural that the decision will take longer to produce. Nevertheless, it is a *closer* measure than, perhaps, the time taken to get to a decision on the merits. At the very least it is an alternative measure.

These are plotted, as against the year of the hearing, and illustrated in Figure 5. That is to say, we have plotted how long it took to render a decision for an opposition heard in 1986, or 1987, through to 2002.

Figure 5: Number of days from opposition hearing to merits decision, by year of hearing, 1988–2002



The length of time it takes to render a decision for an opposition varies significantly, from a minimum of 10 days to a maximum of over 630 days. Overall, however, the median time from hearing to decision during the period studied was 115 days. The trend over time has been for this median time to decrease, from 239 days at the start of the period to 130 days at the end of the period: a significant improvement on the face of it.<sup>49</sup>

#### 3 Extensions of Time

One consistently controversial issue in patent oppositions has been the delay caused by extensions of time allowed to file evidence which, according to

<sup>48</sup> We are informed by IP Australia that this is quite common.

<sup>49</sup> We do not make any claim here for statistical significance.

numerous law reform bodies, are too easy to obtain.<sup>50</sup> For example, in June 2009, stakeholders indicated to IP Australia that 'proceedings are sometimes deliberately extended, and that the objective of the opponent can sometimes be delay';<sup>51</sup> such delays are often cited as very problematic to patent applicants. According to the ACIP 2006 Issues Paper, 'Post-Grant Patent Enforcement Strategies':

Delays in patent opposition can present huge difficulties for patent owners as anecdotal evidence suggests that these proceedings are sometimes tactically used by opponents to hold up the possibility of an infringement action and to draw out the process at greater expense for the other party.<sup>52</sup>

While it is quite plausible that some of the reasons for parties seeking extensions of time are tactical, there will be other substantive reasons behind such requests. Certain grounds of opposition, namely inventive step and entitlement, are largely determined by factual evidence. The practice is to provide evidence by way of sworn affidavit. Particularly when it is pleaded that the invention as claimed lacks an inventive step, legal decisions have led to the practice of this evidence being prepared in a time-consuming way - which is likely to provide valid reasons for seeking extensions of time in certain situations. In particular, Minnesota Mining & Manufacturing Company v Tyco *Electronics Ptv Ltd* sets out certain principles – governing the selection of experts, the material that can be provided to them, the issues to be addressed by or withheld from them, and the interaction between them in a hypothetical team – which need to be followed for evidence to be of probative value in a dispute about inventive step.53 Although patent oppositions are not required to follow curial rules of evidence, parties to oppositions as a matter of practice often prepare evidence to 'court standard', so that it may be used in court at a later date in the event that the opposition outcome is appealed or a revocation action is initiated.

We do not have information on all sought and granted extensions of time, as we only have information where there was a decision of the Patent Office on an extension that has been reported on AustLII, which will generally only occur where the extension is opposed by the other party.

<sup>50</sup> See, eg, the discussion regarding the views of various law reform bodies in above nn 10, 11, 12 and 13.

<sup>51</sup> Resolving Patent Opposition Proceedings Faster, above n 13, 5.

<sup>52</sup> ACIP, above n 14, 13.

<sup>53</sup> Minnesota Mining & Manufacturing Company v Tyco Electronics Pty Ltd (2002) 56 IPR 248, 258–9.

#### Table 2 contains basic information about these decisions.

	Extensi	ons sought by Opponent	Extensions sought by Patent Applicant		
	Sought	Successful	Sought	Successful	
1 <sup>st</sup> contested application for extension of time	148	128 (86.5%)	32	32 (100%)	
2 <sup>nd</sup> or more contested application for extension of time	27	22 (81.4%)	8	7 (87.5%)	
Total	175	150 (85.7%)	40	39 (97.5%)	

Table 2: Results in contested applications for extensions of time, by party seeking the extension, oppositions filed 1986–2002

Source: IPRIA Opposition Database

Table 2 demonstrates that the likelihood of a contested application for an extension of time being granted varies depending on which party is making the application. Patent applicants have a higher success rate (97.5 per cent as opposed to 85.7 per cent for opponents). Our database contains only one case where a patent applicant was unsuccessful when seeking an application for an extension of time that was contested, compared to twenty-five such unsuccessful applications filed by opponents. This apparent bias is not surprising: it is most likely the patent applicant who is disadvantaged by delays in the opposition process, because they cannot take action against potential infringers until they have a granted right; extensions sought by opponents are more likely to be motivated by a desire to draw out the procedure and delay grant. We would therefore expect that IP Australia would apply greater scrutiny to applications by opponents.

Even in the case of extensions of time sought by the opponent, IP Australia appears to have been generous in granting extensions: opponents succeed even in contested applications 86 per cent of the time. This may explain what seems to be quite a low contestation rate. For oppositions filed 1986–2002, there were 215 contested applications for extensions of time, relating to 180 different patents, a relatively small figure given a total of 1464 patents opposed from 1986–2002 that were eventually sealed and 2021 patents opposed during that time.<sup>54</sup> This may

<sup>54</sup> Given the number of complaints about extensions of time, and the number of oppositions that extend beyond official time limits, a figure of extensions in only 10 per cent of the oppositions filed is, prima facie, low. We do not have the figures for the numbers of extensions granted in that period and cannot calculate an actual extension or 'contestation rate'. We are informed, however, by IP Australia, that the experience of the office is that for oppositions which reach a hearing on the merits, on average more than four extensions will have been granted. The case of *Mars UK Limited v Merck & Co, Inc* [1997] APO 22, mentioned above n 44, involved 14 granted extensions.

not be IP Australia's choice, or fault. According to IP Australia, the key reason why extensions have been readily granted is because 'the law has developed in such a way as to significantly narrow the Commissioner's discretion to disallow extensions'.<sup>55</sup> We consider the policy implications in the concluding part of this paper.

## 4 Changes in the 'Settlement Rate' over Time

Another matter of some interest is whether there has been a change over time in the proportion of oppositions that settle, whereby 'settle' we mean that the proceedings are withdrawn, or otherwise terminated without a merits decision. This includes oppositions that are withdrawn both unilaterally, and as a result of a negotiated agreement between the parties.<sup>56</sup> While a changing settlement rate without more information could mean a range of things – increasing dissatisfaction with the system or more strategic filings of oppositions, for example, would both be plausible explanations of a rising settlement rate – it would at least raise a question for investigation.

Figure 6Figure 6 plots the rate at which oppositions filed in a given year result in a decision on the merits.



Figure 6: Proportion of oppositions not resulting in a merits decision by date of filing of opposition, oppositions filed 1986–2000

<sup>55</sup> Resolving Patent Opposition Proceedings Faster, above n 13, 12 [60]. The decisions in Ferocem Pty Ltd v Commissioner of Patents (1994) AIPC 91-057 ('Ferocem') and A Goninan Co Ltd v Commissioner of Patents (1997) 38 IPR 213 ('Goninan') in particular appear to have had an impact on provisions of the Patents Act 1990 (Cth) that might have been intended to limit extensions. The practice under Goninan is that an extension is invariably granted to allow the serving of evidence already at hand.

<sup>56</sup> We recognise that this understanding of 'settle' will not accord with a lawyer's understanding of the term. A lawyer would ordinarily consider a dispute 'settled' only where there was a negotiated agreement between the parties. Our data cannot differentiate between oppositions ended unilaterally and those ended as the result of a negotiated agreement.

Although the actual proportions fluctuate year-by-year, the general trend is away from resolution by Patent Office decision. At the start of the period a little more than one-half of all oppositions were resolved without a merits decision; by the end of the period, 80 per cent were resolved that way. While the method used to generate Figure 6 has some limitations,<sup>57</sup> we believe that the trend is a real one.

## C Outcomes of Oppositions

The third part of our results addresses the outcomes of the opposition process. We consider both the overall outcome for patent applications that are opposed and matters of more detail, such as the grounds of opposition that have been argued and the rate at which those grounds succeed. In this part of the paper we use data relating to oppositions filed between 1986–2000.<sup>58</sup>

There are three ways that the 'outcomes' of the opposition process can be understood. The first is to identify what happened to the *patent applications* that are opposed – that is to say, to identify whether the patent application was withdrawn, lapsed, granted or refused. The second way is to identify the outcome of the *filed oppositions* – that is to say, to identify the proportion of oppositions that are withdrawn, and the proportion of oppositions resulting in a merits decision. Finally, we could look at the subset of cases where IP Australia reached a written decision on the merits of the opposition. All three of these perspectives are relevant to patent applicants and potential opponents and are considered here.

#### **1** Outcomes of Opposed Patent Applications

Table 3 shows the outcomes of all patent applications that were opposed in the period 1986–2000. 'Outcomes' refers to the finalised status of the patent, *regardless* of whether a decision on the merits was issued in relation to the opposition.

<sup>57</sup> Two limitations should be noted. First, a better analysis would track proceedings by the date of settlement, not the date of filing of the opposition, since settlements are more likely to be influenced by events at the time of the settlement, such as important court decisions or trends in the technology market. Unfortunately, our data only reveals the date when matters were finally resolved, that is, when a patent proceeds all the way to sealing. Analysis against the filing date of the opposition is a second best alternative. Second, a patent opposition which 'settled' may have been amended, thus precluding the need for a decision on the merits.

<sup>58</sup> It is necessary, when looking at outcomes, to build in a sufficient time lag so that we can be confident we have final results for as many oppositions as possible. We have data for decisions in oppositions up to the end of 2007. From our analysis it appears that nearly 90 per cent of opposed patents that eventually seal will be sealed within five years from date of filing of the opposition.

Patent status as at October 2006 <sup>59</sup>	Number	Proportion (%)
Patent application withdrawn	326	18.5
Patent application granted - of which:	1,315	74.7
Ceased/Expired	639	36.3
Sealed	674	38.3
Revoked <sup>60</sup>	2	0.1
Patent application refused	46	2.6
Patent application lapsed	45	2.6
Acceptance advertised <sup>61</sup>	29	1.6
Total	1,761	100

Table 3: Outcome of app	olication for the op	posed patent, opr	positions filed	1986-2000

Source: IPRIA Opposition Database

The first thing to note from this data is that approximately one-quarter of all opposed patents do not proceed to grant – because the patent application is withdrawn (18.5 per cent), lapses (2.6 per cent) or is refused (2.6 per cent). On a simplistic reading of this data, the opponent 'succeeds' in nearly 25 per cent of cases.

However, this reading of the data does not take into account the fact that, according to anecdotal evidence, many of the granted patents will have been amended in the course of the opposition procedure.<sup>62</sup> An opponent may only want particular claims within a patent application removed or restricted. That is, an opponent may only be seeking an amendment to the application in order that the ensuing patent does not impact on the opponent's freedom to operate in the market; and, in such circumstances, the opponent may welcome the narrowed patent on the grounds that it will limit the capacity for others to compete in the same market. Given this, the true 'success rate' for oppositions is quite likely to be higher than 25 per cent.

<sup>59</sup> All of the patent statuses in Table 3, excluding 'Patent application granted', were provided by IP Australia as at October 2006.

<sup>60</sup> This status means 'revoked as ordered by the court'. A patent that has been revoked in part will not fall within this status.

<sup>61 &#</sup>x27;Acceptance advertised' means that the patent application is still under opposition as at the cut-off date for our data.

<sup>62</sup> It is not possible to ascertain, from our database, the proportion of the applications that were amended or the extent of these amendments.

The simplistic reading of a 25 per cent success rate for oppositions also does not take into account the fact that a number of the patent applications that do not get sealed are nevertheless not fully 'dead'. Patent applicants who are faced with potential refusal of their patent (or even opposition) have the option of filing a divisional application: a separate application that adopts the same priority date as the 'parent' application.<sup>63</sup> The claims of a divisional application may be identical to or different from claims in the parent application.<sup>64</sup> A divisional application

may be filed at any time up until the patent has been granted. Thus an applicant may, after an application has been opposed, file a divisional application then withdraw, or let lapse, the first application. As it is a different application, the filed opposition does not act on the divisional application (despite any similarities between the parent and the divisional).<sup>65</sup>

If divisional applications are an important factor in the outcomes of oppositions, there will be a higher rate of divisional applications made from opposed applications than are made from non-opposed applications, as a result of opposed applicants seeking to avoid fighting an opposition. There is evidence to support this hypothesis. Information supplied by IP Australia indicates that the rate of filing of divisional applications, for the period 1980–2000, was four per cent – that is, for every 100 patent applications there are, on average, four divisional patent applications filed; but in our database 207 out of 2361 opposed patent applications had, by April 2009, given rise to divisional applications – a proportion of nine per cent, which is consistent with some applicants for opposed patents filing divisional applications represent 33 per cent of the opposed patent applications that did not lead to a sealed patent.<sup>66</sup> Thus, of the quarter of all

<sup>63</sup> The basic purpose of a divisional application is to protect an inventor's rights if they have described more than one invention in their complete specification. It allows the inventor/applicant to divide out one of the inventions from the 'parent' application into a new complete application without losing their priority rights. Thus a patentee who faces opposition on certain claims in their patent may file a divisional on other claims.

<sup>64</sup> Patents Act 1990 (Cth) s 79B.

<sup>65</sup> This possibility is discussed in the Explanatory Memorandum, Intellectual Property Laws Amendment (Raising the Bar) Bill 2011 (Cth) 45 ('Explanatory Memorandum'). Another possibility considered by the Explanatory Memorandum is that the opposed patent may itself be converted to a divisional application of an earlier application filed by the same applicant; thus changing the priority date of the opposed patent to the date of the earlier application, which may render prior art cited in the opposition irrelevant. We note that one goal of the Bill is to prevent the filing of divisionals in this way. First, the Bill proposes prescribing an earlier deadline for the filing of a divisional application: Intellectual Property Laws Amendment (Raising the Bar) Bill 2011 (Cth) sch 3 item 3 (proposed s 79B); Explanatory Memorandum, 47. Second, the Bill proposes permitting the Commissioner to refuse an applicant's request for leave to withdraw their opposed patent application: Intellectual Property Laws Amendment (Raising the Bar) Bill 2011 (Cth) sch 3 item 11 (proposed amendments to s 141). According to the Explanatory Memorandum, the Commissioner would refuse withdrawal where the applicant has filed a divisional application claiming the same, or substantially the same, invention: Explanatory Memorandum, 49.

<sup>66</sup> That is, 207 represents 33 per cent of the 627 opposed patents that were not sealed. It may be noted that this figure of 627 does not match the figures in Table 3. This is because Table 3 only covers patent applications for which an opposition was filed between 1986–2000, whereas our database includes applications filed before and after that period.

oppositions that result in the application not proceeding to grant, only two-thirds result in clear 'wins' for the opponent.

Finally, it may be noted that we had only two patents in our population of patents opposed between 1986–2000 that were revoked subsequent to being sealed.<sup>67</sup>

# 2 Outcomes of Filed Oppositions

Figure 7, below, breaks down the outcomes of filed oppositions: that is, it illustrates what happens to the opposition proceedings (rather than to the patent). It shows a summary of the outcomes of all oppositions filed between 1986 and 2000.



#### Figure 7: Outcomes of the opposition process, oppositions filed 1986 to 2000

These data show that almost 60 per cent of oppositions are withdrawn – which may be good news for patent applicants faced with an opposition for the first time. Less positive for patent applicants is the finding that 20 per cent of

67 With respect to one of these patents, the subsequent history of the patent bears the hallmarks of battles over patents fought on a number of fronts: divisional applications, opposition and through court proceedings. The only real question is why the opponent 'bothered' with an opposition. This patent, number 582902 (concerning thermo plastic multi-layer packaging film and bags made from such films), was the subject of a petition for revocation very shortly after it was sealed (it was sealed in August 1990, and a petition for revocation was filed in January 1991). The petition was successful on the ground that the invention was obvious: *Asahi Kasei Kogyo Kabushiki Kaisha v W R Grace & Co* (1991) 22 IPR 491. An appeal was unsuccessful (and indeed found the patent also lacking in novelty): *W R Grace & Co v Asahi Kasei Kogyo Kabushiki Kaisha* (1993) 25 IPR 481. With respect to the other patent, we have not been able to locate any relevant court decisions, which suggests that the revocation may have occurred other than by court order.

oppositions progress all the way to a hearing: extending the process of grant for a further 4.5 years, on average, and leading to sizeable expense, given the costs of representation and evidence gathering that are a necessary part of a hearing of the merits of an opposition.

Almost one in five applications do not proceed to sealing after an opposition has been filed. As discussed above, a proportion of these patent applications are 'rebirthed' as divisional applications.

#### **3** Outcomes of Merits Decisions

# (a) Overall

Figure 8 below shows the results for the subset of oppositions where IP Australia has issued a merits decision.





As this Figure shows, the most common outcome of a merits decision (58 per cent) is that leave is granted to amend the opposed patent application. Only a third of decisions leave the opponent entirely unsuccessful. On the other hand, only a small proportion of merits decisions (10 per cent) lead to a declaration that the patent application is invalid. The fact that only one in 10 applications is held invalid may provide little motivation for parties to oppose patent applications; however, as noted above, an amendment to the application may be all that an opponent is seeking. Thus, another way to view the data is that in more than two-thirds of merits decisions the outcome goes against the patent applicant, because the opposed patent either is invalidated or requires amendment.

It should also be noted that even where leave is given to amend a patent, a patent may not end up issuing: it may not be possible for the patentee to amend in such a way as to leave them with valuable rights. In fact, for 57 of the 210 cases

where leave was given to amend the patent application (27 per cent), the patent was never sealed, which suggests that rights satisfactory to the patent owner could not be obtained or that the rights sought were pursued through a divisional application.

# (b) By Country of Origin of Opposed Patent

Table 4 further disaggregates the information presented in Figure 8, by the country of origin of the applicant of the opposed patent.

Opposition outcome	Australian patent applicants (n)	Australian patent applicants (%)	Non-Australian patent applicants (n)	Non-Australian patent applicants (%)
Leave to amend patent application	72	56.25	139	59.15
Patent application upheld	38	29.69	79	33.62
Patent application invalid	18	14.06	17	7.23
Total	128	100	235	100

# Table 4: Outcome of merits decision, patent applications originating in Australia versus outside Australia, oppositions filed 1986-2000

Source IPRIA Opposition Database

These data show that the outcome of any merits decision is not associated with the country of origin of the patent opposed (the very slight differences in figures here are not statistically significant). Thus, there is no evidence for any bias for or against opposed patents that originate in Australia.<sup>68</sup>

# (c) By Grounds of Invalidity Raised

Also of interest are the grounds that are pleaded in oppositions, and which succeed. The method adopted in this study of reading and recording details from

<sup>68</sup> Compare this with empirical studies in the US, which suggest that US inventors receive favourable treatment in American courts: Kimberly A Moore, 'Xenophobia in American Courts' (2003) 97 *Northwestern University Law Review* 1497. However, the situation in US courts is complicated by the presence of juries in patent cases.

merits decisions on oppositions enables us to track the grounds of invalidity that were argued, and that succeeded, before the Patent Office.<sup>69</sup>

Table 5 sets out the figures for the 362 oppositions for which a decision on the merits was issued by IP Australia. The first two columns indicate the frequency with which the ground was argued. The two final columns address the 'success rate' of the ground. A ground was noted as 'successful' if it either resulted in cancellation or amendment of at least one claim of the patent, or if IP Australia granted leave to amend at least one claim. The success rate is calculated as a proportion of cases where there was a result on the relevant ground.<sup>70</sup>

Ground of invalidity	Frequency: how ofte argued	en ground is	Success rate: how often decision-maker accepts the ground is made out		
	Number of all merits decisions (n)	Proportion of all merits decisions (%)	Number of all merits decisions (n)	Proportion of all decisions where ground is argued (%)	
Novelty	332	91.71	120	36.14	
Inventive step	297	82.04	86	28.96	
Section 40 specification grounds (not including fair basis)	257	70.99	110	42.80	
Fair basis	208	57.46	102	49.04	
Subject matter (manner of manufacture)	152	42.00	15	9.87	
Entitlement	26	7.18	5	19.23	
Utility	3	0.83	0	0	

Table 5: Frequency and success rate of grounds argued,	oppositions filed 1986–2000
(n=362)	

Source: IPRIA Opposition Database

<sup>69</sup> Decisions issued by IP Australia, like many administrative decisions, are highly structured: they record each ground which has been argued and the result in relation to that ground. Compare this to court decisions where it is often difficult to ascertain what grounds or issues have been argued. In a similar study of court decisions we were unable to track which grounds were argued: see Weatherall and Jensen, above n 21, 260.

<sup>70</sup> This number is generated by adding the number of times where the ground was successful and the number of decisions where the ground failed - meaning that the numbers do not exactly match the numbers in the 'frequency' columns because sometimes no decision was rendered on the ground, eg, because parties were given a chance to make further submissions on the issue. See, eg, Commonwealth Scientific and Industrial Research Organisation v Asterol International [1994] APO 76 (22 December 1994). There were two decisions ([1994] APO 76 and [1994] APO 77) where no decision was made on the issue of novelty (decision was reserved to allow for certain things to be done): Commonwealth Scientific and Industrial Research Organisation v Asterol International [1994] APO 76 (22 December 1994); Commonwealth Scientific and Industrial Research Organisation v Asterol International [1994] APO 77 (22 December 1994).

A number of observations may be made about these results. First, issues such as entitlement (which can be raised in a separate form of dedicated proceedings)<sup>71</sup> or secret use were rarely raised;<sup>72</sup> usefulness was also raised only relatively rarely, although it should be noted that prior to 1 January 2005, it could not be raised as a ground of opposition.<sup>73</sup> The most frequently asserted grounds of invalidity are lack of novelty and lack of inventive step (that is, obviousness), which were argued in more than 90 per cent and 80 per cent, respectively, of all oppositions that proceeded to a merits decision. The popularity of these grounds is consistent with the view that opposition provides a procedure for bringing to the attention of the Patent Office prior art that was not considered, or that was not considered in its proper context, during examination.<sup>74</sup>

The relatively low success rate of these grounds is, however, somewhat surprising. Even taking into account the burden on the opponent of showing that a patent is 'obviously' invalid,<sup>75</sup> we would usually expect that 'success rates' in disputes ought to approach 50 per cent, as cases that clearly fall one side or the other are not pursued to a hearing.<sup>76</sup>

The frequency and success rate of the section 40 grounds are notable. While it is generally acknowledged that the Patent Office cannot be expected to locate all prior art or put itself in the shoes of the hypothetical skilled addressee,<sup>77</sup> prima facie one might expect that issues concerning the drafting of the specification and the claims are well within the Patent Office's competence – and not a matter where outside assistance should be required. And yet, these are the most frequently successful grounds. We acknowledge that at least some practitioners believe that this is an important role for opposition, on the basis that third party outsiders and in particular competitors are in the best position to identify problems in the drafting of patents that may lead to (unintended) impacts on competitors; it could be argued, in other words, that the Patent Office's assessment of drafting grounds are no less assisted by third party input than is its application of the tests for novelty or inventive step. In the theoretical

<sup>71</sup> Patents Act s 17.

<sup>72</sup> Secret use was argued in only one opposition that went to a merits decision in the period studied. Issues under *Patents Act* s 18(2) (human beings and the biological processes for their generation) were not argued in any opposition that went to a hearing.

<sup>73</sup> The change occurred owing to the US Free Trade Agreement Implementation Act 2004 (Cth) sch 8.

<sup>74</sup> It is not possible from our data to separate out those cases involving genuinely new prior art (ie, art that was not considered in examination) from oppositions which seek to convince the office that its initial decision on a known document was incorrect.

<sup>75</sup> F Hoffman La-Roche AG v New England Biolabs Inc (2000) 99 FCR 56, 66 [47] ('F Hoffman La-Roche AG').

<sup>76</sup> George L Priest and Benjamin Klein, 'The Selection of Disputes for Litigation' (1984) 13 Journal of Legal Studies 1, 17. One possible explanation lies in the fact that parties plead and argue more grounds than they think they are likely to win. The Priest and Klein analysis is based on 'single issue' litigation. Notably, on some grounds the success rates do approach 50 per cent (fair basis in particular). Provided there is at least one ground where the chances of the parties are evenly matched, the whole opposition may well go forward. We think there are other explanations. These are discussed in the Analysis Part below.

<sup>77</sup> See above discussion at nn 3–4 and accompanying text.

justifications for opposition, however, there is no doubt that 'unknown prior art' rather than 'unanticipated interpretations of patents' is at the core of the rationales for having the system.<sup>78</sup>

The low success rate on the ground of patentable subject matter is striking. Further examination of these cases reveals, first, that in only five out of 15 decisions was the patent held invalid: in the remaining proceedings, leave was granted to amend the patent. In other words, most of these decisions relate to drafting rather than full invalidity. Further, it should also be noted that most of the 15 cases where this ground was successful involved patents said to claim mere collocations of known integers (three cases)<sup>79</sup>, Microcell-type problems (claim can be characterised as 'nothing but a claim for the use of a known material in the manufacture of known articles for the purpose of which its known properties make that material suitable<sup>'80</sup>) (seven cases)<sup>81</sup> or a problem with a claim that defines the invention only in terms of known desiderata (two cases).82 There are only two of these oppositions that raise what a lay person might consider a substantive question relating to whether the subject matter of the patent properly fell within the bounds of the patent system at all: one involving a claim for a board game, considered, inter alia, not to involve a contribution to the 'useful arts' and not to disclose any mechanical effect;<sup>83</sup> and another involving a claim to a product (human DNA encoding human 5-HT1D) where the only contribution of the applicant was to have found a new property of that product.<sup>84</sup>

#### (d) By Prior Art Relied On

Figure 9 shows the extent to which the types of prior art are relied on, and are successful, in opposition hearings.

<sup>78</sup> See, eg, Merges, above n 2, 605; cited in Federal Trade Commission, above n 4, 19; Mark D Janis, 'Rethinking Reexamination: Toward a Viable Administrative Revocation System for US Patent Law' (1997) 11 Harvard Journal of Law & Technology 1 (discussing the 'curative' role of patent reexaminations in the US). See also discussion in Kimberlee Weatherall, 'It's Not Just Competitors: Acknowledging and Accommodating "Interfering Busybodies" and Their Challenges to Patent Validity' (2009) 12 Journal of World Intellectual Property 500, 504–10.

<sup>79</sup> Monsanto Co v Zeneca Ltd (1996) 36 IPR 120; Hope v Heggies Bulkhaul Ltd (1996) 34 IPR 584; Alcon Laboratories Inc v Bausch & Lomb Inc [2000] APO 11 (8 February 2000).

<sup>80</sup> Commissioner of Patents v Microcell Ltd (1959) 102 CLR 232, 251 ('Microcell').

<sup>81</sup> American National Can Co v W R Grace and Co Conn [1994] APO 1 (10 January 1994); Asahi Kasei Kogyo Kabushiki Kaisha v W R Grace and Co Conn [1997] APO 1 (8 January 1997); Johnson v The Broken Hill Pty Co Ltd [1998] APO 26 (4 May 1998); Belden Wire and Cable Co v Pacific Dunlop Ltd (1997) 38 IPR 605; National Starch and Chemical Investment Holding Corporation v Goodman Fielder Ltd [1999] APO 41 (9 July 1999); Pharmacia & Upjohn AB v CSL Ltd [2000] APO 58 (15 September 2000); Weatherford Australia Pty Ltd v Lettela Pty Ltd [2003] APO 51 (14 November 2003).

<sup>82</sup> Lesaffre et Cie v Burns Philp Research and Development Pty Ltd [1999] APO 32 (19 May 1999); Takeda Chemical Industries v F Hoffmann-La Roche Aktiengesellschaft [1996] APO 3 (18 January 1996). One other opposition refers to the invention lacking the necessary 'quality of inventiveness', analogous to either a Microcell or Ramset mere collocation argument: Microcell (1959) 102 CLR 232; Advanced Building Systems Pty Ltd v Ramset Fasteners (Aust) Pty Ltd (1993) 26 IPR 171 ('Ramset').

<sup>83</sup> A Couple 'a Cowboys Pty Ltd v Ward (1995) 31 IPR 45.

<sup>84</sup> Synaptic Pharmaceutical Corporation v Astra Aktiebolag [1998] APO 49 (9 September 1998).





The first thing to note from Figure 9 is that multiple pieces of prior art were frequently relied upon in any given opposition proceedings. In the 332 merits hearings in which lack of novelty was a ground of opposition, 532 examples of prior art were cited. This is consistent with the procedure in examination, during which examiners often cite multiple documents.

The second thing to note is that previously granted patents are the most commonly used form of prior art in opposition proceedings. This goes against one of the arguments in the literature concerning oppositions. One argument in favour of opposition is that it is a way to get *different* kinds of prior art – that is, material with which the Office would be less familiar, such as non-patent documents – before the Office.<sup>85</sup> However, if 75 per cent of the material being relied on consists of patents, this argument is weaker.

The data cannot definitively tell us the value of the opposition process with respect to the provision of *new* prior art to IP Australia, because they do not provide a means for determining whether or not the prior art used in merits hearings is prior art that the patent examiner had already considered during the initial examination of the patent application.<sup>86</sup> While it would be quite reasonable to make the assumption that the examiner will not have had access to information about public use or secret use of the invention, such an assumption is less reasonable in respect of non-patent documents, and it would be unreasonable in respect of patent documents. This means the data do not allow us to identify

<sup>85</sup> See, eg, Merges, above n 2, 604–5.

<sup>86</sup> This could not be determined reliably from reading merits decisions; it would have required looking at the original patent file.

whether arguments over novelty and inventive step in merits hearings are more about the effect of prior art that *should* have been, but was not, considered during the examination of the patent application, or more about interpreting (differently) the prior art that *was* considered during the examination.

What the data do allow us to identify is the relative rates of success of the different types of prior art: other patents, non-patent documents and examples of public acts or prior use. Prior art consisting of previous patent applications and patent grants had the highest level of success -33 per cent compared with 20 per cent for the other two types of prior art.

# **III ANALYSIS**

In this part of the paper we consider what, if anything, the data have to say about the extent to which the Australian patent opposition process is meeting the objectives of providing an effective means for precluding imprudent grants of patents, and providing an efficient alternative to revocation.

#### A An Effective Means to Preclude Imprudent Grants?

An opposition procedure will not be an effective means of precluding the imprudent grant of patents unless at least two things occur: first, the procedure is actually used; secondly, when the process is used, it actually results in changes in the outcome of the patent application procedure. We analyse the results from our data on these two grounds, to see how the utilisation and the outcomes of the Australian procedure compare with the utilisation and outcomes of similar procedures in other countries.

#### **1** Utilisation of Procedure

Two observations on utilisation of the procedure may be made from the results of our research. The first is the proportion of patent applications that are opposed. The second relates to the uneven nature of opposition across technology areas and 'nationality' of applications.

Our data suggest that the intensity of use of the Australian process is both low, and slightly declining over time. On average, 0.85 per cent of all patent applications in Australia are opposed. To understand what this utilisation rate says about the Australian system it is necessary to have some benchmark against which to compare it. Three available, albeit imperfect, benchmarks are the utilisation rates of the post-grant opposition process in the European Patent Office ('EPO'), of the re-examination process in the United States Patent and Trademark Office ('USPTO'), and of the pre-grant process in the British Patent Office prior to its replacement with a post-grant process.

According to Graham et al, the rate of opposition at the EPO averaged 8.3 per cent of granted patents in the period  $1981-98^{87} - 10$  times the rate of opposition we have observed in Australia in a similar time period. It should be noted, however, this opposition rate for the EPO is not directly comparable with our opposition rate for Australia.<sup>88</sup> First, the rate calculated by Graham et al is the proportion of granted patents that are opposed; ours is the proportion of applications. Because patent grants represent a subset of applications, using grants rather than applications to calculate the rate will inflate the rate. More generally, the comparatively high rate of opposition before the EPO is, in part, the result of it being the only opportunity to use a single procedure to revoke patents across multiple jurisdictions resulting from a single EPO patent application:<sup>89</sup> a party who misses the opportunity to oppose a patent is potentially faced with multiple lawsuits (one in each national jurisdiction) to revoke it later. It has also been argued that high use of the EPO process is due to the propensity to use the system in Germany owing to historical and psychological factors specific to that country.<sup>90</sup>

The rate of opposition in Australia is significantly higher than the rate of reexamination in the USPTO. Graham et al report that the re-examination rate for

88 In addition to the differences cited in the following text, it is worth noting that divisional practice in the EPO is different from divisional practice in Australia. In particular, a divisional application can only be filed up to two years after the first examiner's report, and cannot be filed after grant – meaning that divisionals are not a continuing factor during Europe's (post-grant) opposition process: Convention on the Grant of European Patents (European Patent Convention) (with Implementing Regulations, Protocol on Jurisdiction and the Recognition of Decisions in Respect of the Right to the Grant of a European Patent, Protocol on Privileges and Immunities of the European Patent Organisation, Protocol on the Centralisation of the European Patent System and on Its Introduction, and Protocol on the Interpretation of Article 69 of the Convention), opened for signature 5 October 1973, 1065 UNTS 199 (entered into force 7 October 1977) Implementing Regulations r 36, as adopted by decision of the Administrative Council of the European Patent Organisation on 7 December 2006 and amended by Decision of the Administrative Council CA/D 2/09 of 25 March 2009 (2009) OJ EPO, 296.

89 Fiona Rotstein and Chris Dent, 'Third-Party Patent Challenges in Europe, the United States and Australia: A Comparative Analysis' (2009) 12 *Journal of World Intellectual Property* 467, 484. If so, the number of oppositions in Europe may change if current proposals to institute a European Patent Court become reality. On 4 December 2009 the EU Competitiveness Council reached a political agreement concerning the establishment of a European Union Patent (formerly called a Community Patent) and a European and European Union Patent Court ('EEUPC'). See Council of the European Union, 'Conclusions on an Enhanced Patent System in Europe' (Press Release, 4 December 2009) <http://www.consilium.europa.eu/uedocs/cms\_data/docs/pressdata/en/intm/111744.pdf>. Note however that on 8 March 2011 the European Court of Justice issued an opinion holding that the envisaged agreement creating a unified patent litigation system (currently called 'European and Community Patents Court') is not compatible with the provisions of treaties constituting the European Union: *Opinion 1/09 – Opinion delivered pursuant to Article 218(11) TFEU* (European Court of Justice, 8 March 2011).

<sup>&</sup>lt;sup>87</sup> Graham et al, above n 4, 91. Note that the rate of opposition in the EPO has been in decline since that period, as disclosed by the EPO in its Annual Reports. The opposition rate for 2009, the most recent year for which data is available, was 4.7 per cent: European Patent Office, *Annual Report 2009* (2010) 18.

<sup>90</sup> See Thomas Adam and Michael Spence, Opposition in the European Patent Office: An Underestimated Weapon? (Olswang/Oxford Intellectual Property Research Centre, 2001) 10–3. This is consistent with the overwhelmingly disproportionate use of the system by German nationals (52 per cent of all oppositions filed in 2000): at 8.

the period 1981–98 was 0.3 per cent<sup>91</sup> – a third of the Australian rate for opposition. Further, the USPTO rate calculation, like the EPO rate calculation, uses patent grants rather than patent applications, meaning that USPTO rate is inflated relative to our measure.

The Australian opposition rate is quite close to the historical rate of opposition in Great Britain when that country had a pre-grant opposition system. According to Federico, the rate of opposition in the British Patent Office in the period 1950–54 was one per cent of patent applications.<sup>92</sup> Given that the British pre-grant opposition process bears more resemblance to the Australian process than does the EPO post-grant process,<sup>93</sup> it seems reasonable to conclude that the utilisation rate of the Australian process is within the bounds of what one might expect based on comparative processes in other countries.

Even if the overall rate of utilisation is low, we might accept that the procedure was 'effective', and hence justified, if it is of particular relevance to local parties.<sup>94</sup> Some of the data reported in this paper support such an interpretation: in particular, as Figure 2 shows,<sup>95</sup> patent applications originating from Australia and New Zealand are disproportionately opposed in Australia. Our data also show that the intensity of patent oppositions varies considerably by technology.<sup>96</sup> In presenting the results above,<sup>97</sup> we noted that some technology classes are over-represented, while others are under-represented. Indeed, the most frequently opposed technology classes are over four times the

<sup>91</sup> Graham et al, above n 4, 91.

<sup>92</sup> P J Federico, 'Opposition and Revocation Proceedings in Patent Cases' (1957) 39 Journal of the Patent Office Society 325, 334.

<sup>93</sup> As in Australia now, the British patent system at the relevant time had both a pre-grant opposition process and a re-examination process. For a discussion of the British re-examination process see Theodore H Lassagne, 'Frequency of Opposition Proceedings in Great Britain' (1958) 40 *Journal of the Patent Office Society* 441. The Australian re-examination process in set out in Chapter 9 of the *Patents Act.* 

<sup>94</sup> On this basis, the New Zealand Parliament's Commerce Committee recently recommended retaining pregrant opposition in New Zealand, contrary to the New Zealand Government's proposal to abolish it, on the basis of numerous submissions received stating that pre-grant opposition allowed New Zealand businesses to limit the scope of 'troublesome international applications': see Patents Bill 2008 (235-2) (NZ) (Commerce Committee Report) 10.

<sup>95</sup> See Figure 2 above.

<sup>96</sup> This is consistent with the pattern observed overseas, and the pattern in patent litigation: see especially Dietmar Harhoff and Markus Reitzig, 'Determinants of Opposition Against EPO Patent Grants – The Case of Biotechnology and Pharmaceuticals' (2004) 22 International Journal of Industrial Organization 443.

<sup>97</sup> See Table 1 above.

rate of the least opposed classes.<sup>98</sup> This might suggest that patent oppositions are particularly useful in certain industries. We have not, however, carried out analysis to see if the variations in rate of utilisation across technology areas reflect any particular relevance to the Australian economy.

## 2 Significance of Procedure

For the set of opposed patent applications that we reviewed, the data prima facie suggests that opposition does play a significant role in achieving changes in the outcome of the patent application process where a patent is opposed. This conclusion is based on two observations from the data. First, 25 per cent of all patent applications that have an opposition filed against them do *not* proceed to grant, because they lapse, are refused, or are withdrawn.<sup>99</sup> Secondly, of the opposed patent applications that *do* proceed to grant, a significant number – substantially more than 12 per cent – will have been amended. The sum of these two figures – 25 per cent, plus some number greater than 12 per cent – is the proportion of all patent applications for which the opposition procedure produces a change in outcome. Further, while it may go without saying for experts in patent law, it is worth stressing that the vast majority of amendments restrict the claims in the patent application. Successful arguments on the grounds of novelty, inventive step and section 40 aim to ensure the scope of the patent granted maps to the actual advance in technology achieved by the inventor.<sup>100</sup>

The 12 per cent figure for amendment of the application is the proportion of all opposed patents that receive a merits decision outcome granting leave to amend. The actual proportion of patent applications that are amended will be greater than 12 per cent, because some proportion of the patents that proceed to sealing without an opposition decision on the merits will have been amended. Unfortunately, we cannot ascertain the proportion from our data. We do know, however, that 60 per cent of all oppositions are withdrawn; and that the

<sup>98</sup> Over-representation of a technology class, or a high rate of opposition, may indicate a number of things: that patents in the area are particularly controversial; that the market is an important one, particularly to the local players that we would expect to be using the system more; that patents in the field are particularly valuable (and hence worth opposing); or that there are particularly active and engaged competitors working in the field. See Harhoff and Reitzig, above n 96, finding evidence of frequent use by certain German companies. There is evidence of this in our data. There may, for example, be a 'party effect' operating in relation to surfaces and coatings. There are a number of repeat players in this class, and 23 per cent of the oppositions relate to patent applications made by one company, Cryovac Inc, for inventions relating to films used in packaging. This, coupled with the fact that the four oppositions where we know the identity of the opponent were all brought by the same company (Pechiney Plastic Packaging Inc), bespeaks a skirmish between two close competitors fought on a range of fronts.

<sup>99</sup> It must be recalled that around nine per cent of these applications will have been 'rebirthed' via divisional applications.

<sup>100</sup> Only successful oppositions based on the ground of entitlement may not directly go to limiting the imprudent grant of patents (though they do go to ensuring the right person gains the benefit of the invention).

proportion has been increasing over time.<sup>101</sup> This is a very high figure when compared with the 10 per cent of oppositions in the EPO that do not proceed to a hearing. This very high opposition withdrawal rate supports anecdotal evidence that many patent oppositions are withdrawn as part of a negotiated settlement between the parties, whereby the patent applicant agrees to amend the application on terms satisfactory to the opponent.<sup>102</sup> It seems reasonable to suppose, therefore, that a significant proportion of withdrawn oppositions produce the outcome of amendment to the application. Thus, we are able to observe that well over a third of all opposed patent applications will either not be granted, or be granted in an amended form as a result of the filing of the opposition.<sup>103</sup>

A comparison with the outcome of post-grant opposition proceedings in the EPO is interesting. Patent oppositions in Europe result in revocation of 35 per cent of the opposed patents and amendment of another 33 per cent:<sup>104</sup> in other words, a 'success rate', by our definition, of 68 per cent. To be sure, the incentives for opponents are far greater in the European system, because a successful opposition can 'knock out' or reduce the patent for the entire European market.<sup>105</sup> It seems likely, then, that European opponents will put their

<sup>101</sup> See Figure 6 above. There are a number of possible explanations for an increase in frequency of settlement. One, suggested by the theoretical literature, is that patent law has become clearer over time, thus allowing parties to reach a similar conclusion as to the likely result of the opposition: Priest and Klein, above n 76; Jean O Lanjouw and Mark Schankerman, 'Patent Litigation – Enforcement of Patent Rights in the United States' in Wesley M Cohen and Stephen A Merrill (eds), *Patents in the Knowledge-Based Economy* (National Academies Press, 2003) 145, 149–50, 162–3. We think this unlikely – we are not aware of any literature that claims greater certainty in Australian patent law. Another possible explanation for the increase in settlements is that the opposition process has become significantly more costly over time, thereby providing parties with greater incentive to resolve the opposition without resort to a hearing. A further possible explanation is that there has been increased use of other mechanisms, such as, eg, the filing of divisional applications, leading to oppositions being abandoned: see below n 102.

<sup>102</sup> There may also be other factors at play. Eg, divisional practice in Australia allows for the filing of a divisional application after an opposition is filed. A divisional application could be an innovation patent application or a standard patent application. It is possible, therefore, for a patent applicant, on receipt of an opposition, to file a divisional application for an innovation patent and institute proceedings on the basis of that innovation patent. When strategies of this kind are adopted, it is possible that the focus of any dispute of which an opposition is a part may shift.

<sup>103</sup> The role that negotiation and amendment play in the resolution of opposition proceedings suggests a different perspective on the rate of patent applications declared invalid at a hearing. It is tempting to see the rate of 10 per cent (the proportion of patents declared invalid at an opposition hearing: see Figure 8 above) as being low. It is arguable, however, that this figure is not low on the basis that a patent applicant, by the time of the hearing, knows what the opponent is to argue and, therefore, should have taken steps to amend the application in order to save at least some claims prior to its rejection.

<sup>104</sup> Graham et al, above n 4, 111 (Table 5 contains data for 'Shares of outcomes'; 'Patent amended-total' and 'Patent revoked-total').

<sup>105</sup> Arguably, patents granted by the EPO are more 'valuable' to the patentee than an Australian patent – on the basis that the patentee sought protection for the invention in multiple jurisdictions rather than in a single jurisdiction.

best possible case forward in that procedure, making success more likely.<sup>106</sup> Those who wish to challenge Australian patents, by contrast, may either hold back their best case for use in a subsequent revocation action, or not oppose at all but instead seek revocation after grant.

Another explanation for the difference in opposition success rates could be that IP Australia's initial *examination* of patent applications is more rigorous than that in Europe, resulting in higher quality patents that are less likely to be refused or to be amended as a result of opposition. We are not aware of any literature or commentary suggesting that this is the case.

Yet another possible explanation is that the Australian *opposition* process is less rigorous than in the EPO. It is, for example, possible that the three-person opposition division in the EPO allows a more thorough review, by virtue of the multiple perspectives and experiences that three decision-makers can bring to the hearing. Further, in the EPO, an opposed patent will be revoked if it is invalid on the balance of probabilities<sup>107</sup> (which is the same as the standard in Australia for post-grant revocation). On the other hand, not only are Australian oppositions conducted by a single hearings officer, the Australian courts have practically *required* a less rigorous process, by stating that opposition is intended 'to provide a swift and economical means of settling disputes ... [a] process by which *patents that are obviously invalid* will not be allowed to clutter the register'.<sup>108</sup>

Finally, in Australia a larger number of opponents are making deals with the patent applicant to withdraw the opposition (perhaps in return for a royalty-free licence), thereby reducing the number of oppositions that result in the patent application being refused. It is certainly possible that the patentee in Europe has less reason to negotiate with the opponent than does a patent applicant in Australia, on the basis that the patentee already has the patent, whereas an applicant does not have that certainty in Australia.<sup>109</sup> Our data shows 80 per cent of Australian oppositions do not proceed to a hearing; according to Graham et al,

<sup>106</sup> Economic analysis of litigation suggests that the higher the incentives of the opponent/party in litigation, the more resources they will spend to ensure a favourable outcome (on skilled advocates, or discovering more material) – and the more likely a favourable outcome is: Farrell and Merges, above n 2, 948–52; Kimberly A Moore, 'Judges, Juries, and Patent Cases – An Empirical Peek Inside the Black Box' (2000) 99 *Michigan Law Review* 365, 377–8.

<sup>107</sup> For Australia, see *F Hoffman La-Roche AG* (2000) 99 FCR 56, 66 [47]. For Europe, Janis suggests that in European opposition practice the patentee has a 'presumption of validity' (a standard lower than in the US which requires 'clear and convincing evidence' of invalidity): Janis, above n 78, 105.

<sup>108</sup> F Hoffman La-Roche AG (2000) 99 FCR 56, 66 [47] (emphasis added). We note that the Intellectual Property Laws Amendment (Raising the Bar) Bill 2011 (Cth) sch 1 item 15 proposes to raise this standard to one similar to that applicable in the EPO, that is, on the balance of probabilities.

<sup>109</sup> On the other hand, at the point an opposition is filed, the patent applicant in Australia has various options for keeping the patent 'alive', including filing a divisional application during the opposition. A European patent applicant has no such options: a divisional application cannot be filed after the patent has been granted (in fact, a divisional application cannot be filed after two years from the first examiner's report).

only 10 per cent EPO oppositions do not proceed to a hearing.<sup>110</sup> Also, the period of time in which it is possible to file an opposition is longer in Europe – nine months after grant, compared with three months after acceptance in Australia. This may encourage the parties in Europe to negotiate *prior* to filing an opposition, which may, in turn, mean that the cases where the patent is opposed in Europe are more 'serious' than those in Australia.

#### **B** An Efficient Alternative to Revocation?

The second general objective of patent oppositions is to provide an efficient alternative to revocation in the courts. There are two key standards which would if met, mean that an opposition procedure was achieving this objective. The first is that the procedure is suited to resolving disputes on grounds that do not require the full-blown evidentiary processes inherent in court litigation for determination. The second is that the procedure is quicker and less expensive than court litigation. We analyse the results from our data to see whether it supports a finding the Australian opposition procedure meets either of these goals.

## 1 Role of Evidence in Determining Oppositions

A key aspect of our results concerns the grounds of opposition – in particular, the low success rates of grounds like lack of inventive step (successful in 29 per cent of cases where pleaded) and lack of novelty (successful in 36 per cent of cases where pleaded) and the grounds which have higher rates of success (such as fair basis: 49 per cent). These differences may not be meaningful – that is, they simply may be due to random variation in the merits of the arguments raised under the various grounds. However, the direction of the difference is contrary both to that which would be hypothesised based on the theoretical literature discussing the purposes of the opposition procedure, and to that which pertains in revocation actions.<sup>111</sup> Thus, it is not inappropriate to proceed on the basis that this result is meaningful, and seek to identify its meaning.

We consider that a likely explanation for the differences in the rates of success for the different grounds of opposition is how the grounds have to be proved at the hearing. Our data show that the two grounds of challenge that have the highest rates of success in oppositions are grounds based on lack of compliance with section 40 - namely, lack of fair basis, and lack of sufficiency of description. These are grounds that are concerned predominantly with drafting

<sup>110</sup> Graham et al, above n 4. Also, it must be noted that there are restrictions in both the Australian and European processes on the ability of the parties to 'settle' an opposition – the Commissioner of Patents 'may determine the opposition whether or not the opponent has requested determination of the opposition': *Patents Regulations 1991* (Cth) reg 5.6; and the EPO has the power to pursue the case on its own, even if the opposition is withdrawn: *European Patent Convention* r 60.

<sup>111</sup> According to Table 7 in Weatherall and Jensen, above n 21, 278, the most successful grounds of revocation in Australian patent litigation are lack of novelty (47 per cent) and lack of inventive step (35 per cent). Section 40 grounds of revocation have lower success rates: lack of fair basis and lack of clarity are successful only 29 per cent of the time, and lack of sufficient description is successful only 12 per cent of the time.

of the claims and the description. Challenges to the validity of the accepted patent on these grounds are law-based rather than evidence-based;<sup>112</sup> they rely much more on legal argument than on evidence.

This is to be contrasted with two of the less successful grounds of challenge: lack of entitlement and lack of inventive step. The determination of an opposition based on either of these grounds is substantially based on evidence of what the alleged inventor actually did, in the case of entitlement, and what a non-inventive person skilled in the art would have done in light of the prior art, in the case of inventive step.<sup>113</sup> Resolution of a challenge to grant on these grounds requires the testing and the weighing of this evidence – tasks that might be best undertaken through a process that includes oral examination and cross-examination of those providing the evidence.<sup>114</sup>

Our argument is that the task of deciding on the merits of a law-based ground of opposition may be more clear-cut than the task of deciding on the merits of an evidence-based ground. In the former case the decision-maker needs only to be persuaded of the merits of the opponent's legal argument whereas in the latter case he or she needs to be persuaded in addition that the opponent's factual evidence overcomes the burden of proof.<sup>115</sup> If this supposition is correct, two outcomes might be expected. First, that a section 40 ground is more likely to succeed than a novelty or inventive step ground, all other things being equal. Secondly, that opponents would be able to be more selective in choosing the oppositions in which to argue section 40 grounds, so that these grounds are argued only where the prospects of success appear stronger – with the consequence that the success rate will be higher. We note that the rates at which

- 114 In practice, oral examination, although permitted in opposition hearings, is rare.
- 115 Which, as noted, is that the patent is 'obviously invalid': *F Hoffman La-Roche AG* (2000) 99 FCR 56, 66 [47]. We note, however, that the Intellectual Property Laws Amendment (Raising the Bar) Bill 2011 (Cth) sch 1 item 15 proposes to raise this burden to a balance of probabilities test.

<sup>112</sup> By 'law-based', we mean that the ground is concerned primarily with legal interpretive matters, such as what is the meaning of the words of the claims and of the description. By 'evidence-based', in contrast, we mean that the ground is concerned primarily with factual matters, such as what was the published prior art, what was the common general knowledge, what prior art would have been ascertained, understood and regarded as relevant, and what would have been obvious to a person skilled in the art in light of the general knowledge.

<sup>113</sup> We note another explanation for the lack of success proving lack of inventive step is the low standard for inventive step in Australian law, as set down in High Court decisions over the past 30 years, combined with the substantial statutory restrictions in ss 7(2) and 7(3) on the prior art that may be taken into account in determining whether an invention involves an inventive step: Minnesota Mining and Manufacturing Co v Beiersdorf (Australia) Ltd (1980) 144 CLR 253 (concerning provisions of the 1952 Act): Aktiebolaget Hassle v Alphapharm Ptv Ltd (2002) 212 CLR 411 (concerning provisions of the 1952 Act); Firebelt Pty Ltd v Brambles Australia Ltd (2002) 188 ALR 280 (concerning provisions of the 1990 Act) and Lockwood Security Products Pty Ltd v Doric Products Pty Ltd (No 2) (2007) 235 CLR 173 (concerning provisions of the 1990 Act). For commentary on the current position, see Charles Lawson, 'Quantum of Obviousness in Australian Patent Laws' (2008) 19 Australian Intellectual Property Journal 43; IP Australia, 'Getting the Balance Right: Toward a Stronger and More Efficient IP Rights System' (Consultation Paper, March 2009) 12-3. The problem with this explanation is that even with a low standard, we would usually expect to see parties assess their chances of winning according to that standard, and hence not pursuing grounds unlikely to succeed - in other words, theory would predict that the success rate should nevertheless approach 50 per cent.

the section 40 grounds are argued are, indeed, lower than the rates at which the novelty and inventive step grounds are argued.

The implication is that the Australian pre-grant opposition procedure is less suited to evidence-based challenges than it is to law-based challenges, because evidence-based challenges are best served by a procedure designed to test and weigh evidence – a feature that is characteristic of litigation, but not characteristic of the non-curial hearing that occurs in the Australian pre-grant opposition procedure. The ill-suited nature of the opposition procedure to evidence-based grounds of challenge is compounded by the fact that a higher standard of proof is required in opposition proceedings compared with in examination ('obviously' invalid, rather than invalid on the 'balance of probabilities').<sup>116</sup> It is also compounded, in the specific case of inventive step, by the statutory restrictions on the prior art that may be considered and by the low standard of the legal test for what constitutes an inventive step.

In evidence-based challenges, there is one form of evidence that appears to be well-suited to the procedure: prior patent specifications. Our data shows that these patent documents have the highest level of success amongst the categories of prior art used in evidence - 33 per cent, compared with 20 per cent for the other two types of prior art. One might expect that previous patent applications and grants would have a lesser chance of success in invalidating an opposed patent, as they are more likely to have been considered by the examiner in the initial examination of the patent. It may be, however, that the prior art patent specifications that prove successful in an opposition are patent specifications that the examiner did not consider during examination. Another possible explanation is that hearings officers, being former patent examiners, are most comfortable with patents as evidence.<sup>117</sup> Because of burden and standard of proof issues, it may be harder to convince a hearings officer of invalidity by evidence of prior use or secret use than by evidence of prior patent specifications.<sup>118</sup> Further, this result may be due to the law concerning novelty, which requires, for there to be anticipation, that all of the essential integers of the invention be disclosed in the relevant piece of prior art.<sup>119</sup> While patent specifications will spell out the workings of an invention and all of its 'parts', such specificity will not always be found in non-patent prior art.<sup>120</sup> Finally, at least in some cases, it may be impossible to show that non-patent prior art was publicly available prior to the priority date.121

<sup>116</sup> F Hoffman La-Roche AG (2000) 99 FCR 56, 66 [47].

<sup>117</sup> It may also be noted that in a number of cases, prior art has been unsuccessful due to failure on the part of the opponent to show that the relevant art was publicly available at the relevant time: see, eg, cases cited above n 37. Such failures by opponents, particularly opponents acting in person rather than through a legal representative, may have skewed the success rates here.

<sup>118</sup> This is not a criticism of the work of examiners and officers, but an acknowledgement of their specific skills and training.

<sup>119</sup> Nicaro Holdings Pty Ltd v Martin Engineering Co (1990) 16 IPR 545; Ramset (1993) 26 IPR 171.

<sup>120</sup> See, eg, Ramset (1993) 26 IPR 171.

<sup>121</sup> See, eg, several of the cases cited above n 37.

#### 2 Duration of Procedure

The data reported here do not suggest that opposition is significantly more efficient than court proceedings. The mean number of days' delay to grant caused by a patent opposition is 865 days (2.37 yrs); the median is 656 days (1.80 yrs). At least part of the fault for this delay would seem to lie in the ready availability of extensions of time. Even in cases where extensions of time were opposed, over 80 per cent of extensions have been allowed by hearings officers at IP Australia. Even the time that elapses between a hearing and the rendering of a decision in an opposition is quite long, averaging 141 (calendar) days (with a median of 115 days).

The relative informality of the patent opposition process means that it will generally be cheaper than litigation.<sup>122</sup> However, the amount of time it takes to resolve the dispute is similar. According to earlier work of one of the present authors, the mean number of days from the filing of proceedings to the handing down of a decision in patent litigation is 1000 days (2.74 years).<sup>123</sup> A difference in average duration of only three months is surprising given how much more complex the court proceedings should be. Most court proceedings in the earlier study involved *both* a claim for infringement and a cross-claim for revocation, and cases prosecuted through the courts also involve processes like discovery not found in oppositions. We would have expected that oppositions would be significantly shorter. A legal action that involves only a claim for revocation would be expected to take less time than an action dealing also with a claim for infringement; we are unable however to test whether such a proceeding takes more or less time than opposition on average because very few revocation-only cases proceed through Australian courts.<sup>124</sup>

The duration of Australian opposition proceedings is similar to proceedings overseas. According to Hall and Harhoff, the median duration of a post-grant opposition proceeding in the EPO (excluding any appeal) is 1.9 years.<sup>125</sup> One study of *inter partes* re-examination in the United States concluded that, while it was difficult to estimate how long a fully contested *inter partes* re-examination will take because no fully contested proceeding has concluded, it appears that it is taking on average at least two years, and more likely three years.<sup>126</sup>

<sup>122</sup> Rotstein and Dent have reported anecdotal evidence of oppositions costing parties between \$20 000 and \$100 000 and litigation expenses of between \$750 000 and \$1 000 000: Rotstein and Dent, above n 89, 480 (these figures have been converted to Australian dollars using the exchange rate given in the publication).

<sup>123</sup> Weatherall and Jensen, above n 21, 262.

<sup>124</sup> Ibid. Of the 52 proceedings examined in the period 1997–2003, only two did not address both infringement and revocation.

<sup>125</sup> Bronwyn H Hall and Dietmar Harhoff, 'Post-Grant Reviews in the US Patent System – Design Choices and Expected Impact' (2004) 19 *Berkeley Technology Law Journal* 989, 1003. The median duration of an opposition appeal case is an additional 2.1 years.

<sup>126</sup> Matthew A Smith, Inter Partes Reexamination (1E ed, 2009) 54 <http://www.mediafire.com/?z2hzjgyzkzv>. The inter partes re-examination is more comparable to the Australian procedure than the *ex parte* re-examination procedure, because it includes third party participation in the process.

While it may be said that the delay in Australia is similar to the delay in Europe and the US, the effect is not. Both of the overseas processes take place after grant, and so impose no delay on the grant of the patent or on the ability of the patentee to take action to assert their rights. The pre-grant Australian procedure, in contrast, inevitably delays the grant of the patent, and hence precludes the patent applicant from bringing any legal action against a potential infringer.<sup>127</sup> When seen in this context, the fact that the Australian procedure delays grant by, on average, nearly two years seems highly problematic.

### **IV CONCLUSION**

The evidence presented in this paper provides a mixed picture on whether the Australian patent opposition procedure is meeting its objectives. While the overall degree of utilisation of the procedure is slight, it is comparable with the utilisation of similar procedures in other countries – suggesting that the procedure is perceived by potential patent opponents as having value. There is a higher intensity of utilisation of the procedure in respect of patents originating from Australia – suggesting that the procedure has particular pertinence to Australians. The procedure does produce changes in the outcome of the patent application process, with approximately half or more of all opposed applications either not proceeding to grant or proceeding to grant in an amended form – suggesting that the procedure is significant in its effect. This suggests that the opposition procedure in some form is worth preserving.

On the other hand, although likely to be less costly than litigation, the procedure is not much faster than a court action for revocation and the effect of the delay is potentially more problematic – suggesting that the procedure has only a limited advantage over, and has some disadvantages compared with, the alternative of an action for revocation.

In our opinion, the conclusion that may be drawn from these observations is that the Australian procedure is sub-optimal when judged against its apparent objectives. In particular, the Australian procedure does not provide an alternative to a court action for revocation that is significantly more efficient.<sup>128</sup> This is because it does not appear to be well-suited to challenges on evidence-based grounds like lack of entitlement and lack of inventive step, and because it is not

<sup>127</sup> Subject to a patent applicant's ability to apply for a divisional innovation patent and bring proceedings for infringement of that patent.

<sup>128</sup> If, however, 'alternative to litigation' is understood to mean that the patent opposition procedure offers simply a different (as distinct from better) means by which competitors of a patent applicant can achieve some of the aims that could be sought in court, then the opposition procedure may be seen as successful. That 35 patent applications were held invalid as a result of a merits hearing could mean that those were 35 revocation actions that did not take place in a court. Further, that there were only two successful revocation actions for patents that 'survived' the opposition process could mean that parties do not see litigation as a necessary further post-opposition step (we do not have data with respect to unsuccessful revocation actions, however, there is no anecdotal data suggesting that there is a significant number of 'opposed' patents that are then challenged in court).

substantially quicker than court action. The question that then arises is whether the procedure can be modified to address these deficiencies.

We note that the two deficiencies we have identified are, to some extent, in tension with each other: a procedure that is well suited to resolving evidence-based challenges is unlikely to be quick. Some possible modifications to make the opposition procedure better suited to resolving evidence-based challenges – such as, for example, permitting oral examination of experts – would almost certainly steer the procedure further towards an adversarial process and have the effect of making it slower, with the result that the procedure will become more similar to, rather than a more attractive alternative to, revocation. However, not all possible modifications would have this effect. For example, changing the law on the prior art that can be considered for the purposes of determining inventive step<sup>129</sup> should both increase the prospects of success of that particular evidence-based ground in an opposition and speed up the opposition process.<sup>130</sup>

In our view, reforms to the opposition process should be focussed on making it genuinely distinct from the curial alternative: that is, on making the process quicker. Such reforms could include, for example, setting strict timetables for filing evidence and limiting the grant of extensions of time. More radically, reform could include limits on the type of evidence that may be relied on by parties such as prohibiting reliance on expert evidence on affidavit (either completely, or without first obtaining leave). We recognise that reforms of this kind may lead to some challenges on evidence-based grounds, particularly on the ground of lack of inventive step, being pleaded and fully argued less often. Indeed, it might result in some evidence-based challenges being taken out of the opposition process altogether (and being brought in court, as an action for revocation, instead). The degree to which this occurs could be ameliorated by changes to the law relating to evidence-based grounds of opposition - including, in particular, by changes to the legal test and to the restrictions on the prior art information that can be considered for inventive step. We note that some of these characteristics are found in the re-examination process, already available under Chapter 9 of the Patents Act. However, we are not aware of evidence that parties are using re-examination instead of oppositions. In any event, the choice between seeking re-examination post-grant and lodging an opposition pre-grant lies with the person wanting to remove or restrict the patent. That party therefore is able to choose the process more advantageous to them, which may, in at least some cases, be the one that will increase delays for the patent applicant.

<sup>129</sup> Two possible changes to the law on this issue would be: (i) to amend *Patents Act* s 7(2) to remove the limitation that the common general knowledge is confined to that existing in Australia; and (ii) to amend *Patents Act* s 7(3) to remove the requirement that prior art information for inventive step must be such that a skilled person could reasonably be expected to have been ascertained it, understood it and regarded it as relevant.

<sup>130</sup> We would expect these reforms to speed up the opposition process because it should become easier, and hence quicker, to gather the relevant evidence if it is no longer necessary to prove what was the common general knowledge in Australia (as distinct from anywhere in the world) and what a person skilled in the art would have ascertained, understood and regarded as relevant.

Our view is broadly consistent with IP Australia's recent proposals for a range of changes to the law.<sup>131</sup> Those proposals, if adopted, will reduce the standard of proof on all grounds in oppositions to the balance of probabilities;<sup>132</sup> give the Commissioner more powers over evidence, including the power to refuse a request to summon a witness or require production of documents or articles;<sup>133</sup> and make it less difficult to show that an invention lacked an inventive step.<sup>134</sup> It is clear from our findings that the intended outcome of those proposals – to speed up the opposition procedure in Australia and to make some evidence-based challenges easier to prove – is consistent with the objectives of the procedure and is required given the way the procedure currently operates. What is not clear from our findings, however, is whether those proposals *alone* will be sufficient to remedy the significant gap that exists between the objective and the current practice of the procedure.

<sup>131</sup> We note that some proposals found in the IP Australia, November 2009 Consultation Paper, above n 13, have not made their way into the Intellectual Property Laws Amendment (Raising the Bar) Bill 2011 (Cth). Proposals not pursued include proposals to reduce various periods for filing notices of opposition, statements of grounds and particulars, and evidence; and limiting the power of the Commissioner to grant extensions.

<sup>132</sup> IP Australia, November 2009 Consultation Paper, above n 13, Section 1.4. The proposal in Section 1.4 is to amend s 61 of the *Patents Act* to provide that, in the case of an opposition, the Commissioner must grant a patent unless satisfied that there is no lawful ground of objection to the grant. According to the proposal, this 'has been interpreted as requiring the Commissioner to decide the matter on the civil standard of balance of probabilities'. This proposal is now embodied in the Intellectual Property Laws Amendment (Raising the Bar) Bill 2011 (Cth) sch 1 item 15 (proposed s 60(3A)– (3B)).

<sup>133</sup> Intellectual Property Laws Amendment (Raising the Bar) Bill 2011 (Cth) sch 3 item 14 (proposed amendments to s 210); see also Explanatory Memorandum, above n 65, 50–1.

<sup>134</sup> IP Australia, November 2009 Consultation Paper, above n 13, Section 1.3. The proposals in Section 1.3 include reforms of the type identified in above n 129 and accompanying text. These proposals are now embodied in the Intellectual Property Laws Amendment (Raising the Bar) Bill 2011 (Cth) sch 1 items 2–4.