



INTELLECTUAL PROPERTY SCORECARD 2002-2006

FAST FACTS

- Since 2002 there has been an almost continual increase in the percentage of patents applications in Australia, with a 6.9% increase between 2005 and 2006.
- Trade marks continue to be the most common form of IP protection. Three of the top five trade marks classes relate to services rather than goods. Since their inception in 1979, service marks have in general enjoyed higher annual growth rates compared with growth in goods marks.
- In 2006, Australia ranked 10th for patents granted to foreign-based applicants by the USPTO. The percentage of patent grants to Australians by the USPTO has been rising over the past five years.
- As in Australia, Australians acquired US patents mostly in areas such as Handling and Printing; Information Technology; Medical Engineering; and Consumer Goods and Equipment.
- There has been a trend increase in the number of patents granted to Australians by the EPO, but at a much lower level than grants by the USPTO.
- Areas in which Australia has a Revealed Technological Advantage (RTA) for patents granted by IP Australia include Civil Engineering, Building and Mining; Handling and Printing; Transport; Mechanical Tools; and Space Technology and Weapons. Australia has recorded an RTA for patents granted by the USPTO and the EPO in areas such as Agriculture and Food Machinery; Civil Engineering, Building and Mining; Space Technology and Weapons; and Biotechnology.

DOMESTIC IP PROTECTION ACTIVITY

Intellectual Property Protection Applications (App.) and Grants in Australia, All Sources

	2002	2003	2004	2005	2006
Patent App.	22565	21614	22870	23900	25552
Patent Grant	13702	13011	12739	10979	9426
Innovation Patent App.	1035	1048	1110	1073	1092
Innovation Patent Grant	758	1026	1077	961	1011
Trade Marks App. (no. of classes)	64186	73496	85249	92830	101919
Trade Marks Grant (no. of classes)	51699	50004	53565	62193	69910
Designs App.	4111	4693	5744	5860	5881
Designs Grant	3842	3949	3323	5843	7370
Plant Breeders Rights App.	377	378	337	354	364
Plant Breeders Rights Grant	286	181	234	362	280

- While patent applications grew by 5.9% between 2002 and 2005, they grew by 6.9% between 2005 and 2006.
- Patents granted showed a modest decline between 2002 and 2004 followed by a steeper decline between 2004 and 2006.
- To address the decline in patents granted, IP Australia has increased the number of patent examiners by 27% since 2004-05. Current indications are that the backlog of applications is reducing.

- Innovation patent applications have levelled off at around 1100 per year and the number of innovation patents granted is around 1000 per year.
- Trade marks continue to be the most popular form of intellectual property protection. Between 2002 and 2005 trade marks applications grew by 44.6% and by 9.8% between 2005 and 2006.

Over the same periods, the number of trade marks granted grew by 20.3% and 12.4% respectively. Trade marks are known to be associated with the launch of new innovative products and services.

- From 1997 to 2002, design applications had been generally static at approximately 4000 per year. While an increase was experienced in 2003, the sharp increase in 2004 may have been a consequence of the introduction, in June 2004, of new designs legislation streamlining the registration and examination processes. Clearing a backlog of previous years' applications resulted in high numbers of design grants in 2005 and 2006.
- The plant breeders rights applications have not changed much over the period 2002 to 2006. Grants remained about the same in 2006 as in 2002, and were below applications.

Top 5 Trade Marks Applications in Australia, by Class (C)*

Class	2002	2003	2004	2005	2006
Advert. and Business Mgt. (C35)	5195	6208	7477	8353	9607
Instruments (C9)	6304	6476	7254	7689	8754
Education/Entertain. (C41)	4607	5114	6520	7056	7787
Clothing/Footwear (C25)	4221	5168	6216	6238	6266
Scientific Research (C42)	3242	3513	3962	4297	5346

*Note: Goods and services are divided into different classes according to Nice International Classification System.

- Three of the top five trade marks classes relate to services rather than goods. Since their inception in 1979, service marks have in general enjoyed higher annual growth rates compared with growth in goods marks.

- While Advertising and Business Management is currently the largest category of applications, in percentage terms, the largest increase between 2005 and 2006 (24.4%) was in Scientific Research trade marks.
- The growth of service marks is likely to be associated with the introduction of new services and a growing commercial awareness among organisations.

Patents Applications by and Grants to Australians, Top 5 Technology Groups*

Technology Group	2002	2003	2004	2005	2006
Handling, Printing					
Applications:	236	277	361	308	289
Grants:	67	78	158	198	135
Civil Eng., Building, Mining					
Applications:	458	526	582	586	643
Grants:	168	150	155	160	103
Information Technology					
Applications:	339	399	398	416	370
Grants:	26	112	77	120	91
Consumer Goods, Equipment					
Applications:	445	471	480	538	528
Grants:	107	97	125	95	74
Medical Engineering					
Applications:	193	201	165	225	251
Grants:	60	61	57	63	74

*Note: The number of patents granted in a particular year bears little relationship to the number of patent applications in that year (it is likely to be several years before they proceed to the grant stage).

- Three of the top five patenting technologies belong to well established or mature sectors: Civil Engineering, Building and Mining; Handling and Printing; and Consumer Goods and Equipment.
- Grants for Handling and Printing; and Information Technology areas have shown signs of a general rising trend since 2002.
- Grants in Civil Engineering, Building and Mining; and Consumer Goods and Equipment have shown signs of a general decrease since 2002, while applications numbers have increased.

Patents Granted to Australians, Top 5 Technology Groups for Increased Activity

Technology Group	2002	2003	2004	2005	2006
Handling, Printing	67	78	158	198	135
Information Technology	26	112	77	120	91
Pharmaceuticals, Cosmetics	28	37	28	30	54
Telecommunications	17	38	33	38	41
Audiovisual	13	7	21	16	14



- While Handling and Printing accounted for the largest absolute growth (number of patents granted) from 2002 to 2006, the Information Technology group recorded the highest percentage growth (250%) over that period.
- The strong growth in Handling and Printing patents is primarily due to the efforts of a single specialised company.
- As is the case elsewhere in the world, Telecommunications patents granted to Australians have also recorded growth.
- The Pharmaceuticals and Cosmetics grants to Australians in Australia have increased since 2002, with an impressive growth rate of 80% between 2005 and 2006.

Innovation Patents Granted to Australians, Top 5 Technology Groups*

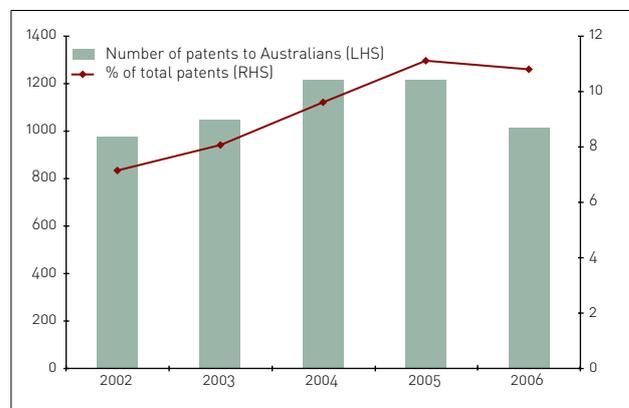
Technology Group	2002	2003	2004	2005	2006
Consumer Goods, Equipment	142	189	192	177	158
Civil Eng., Building, Mining	77	138	153	127	131
Information Technology	60	76	82	68	81
Transport	60	70	74	66	87
Handling, Printing	37	59	69	53	53

* Innovation patents introduced in May 2001

- Innovation patents indicate innovative activities in areas with a shorter commercial life, or lower inventive step, and so are good indicators for innovative activity by small companies and individuals.
- The main technology areas serviced by innovation patents are almost identical to those served by standard patents for Australian companies and individuals. The exception is the relatively high number of Transport innovation patents.

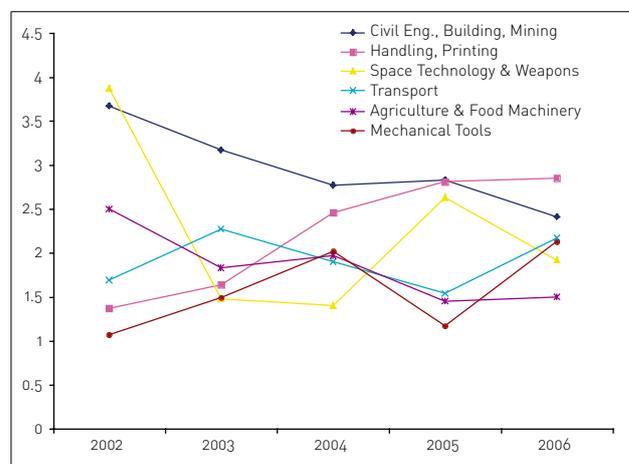
- From 2002 to 2006 innovation patents granted in the Civil Engineering, Building and Mining technology group grew by 70%, the highest growth rate of all the technology classes for innovation patents. Between 2005 and 2006 the highest growth rate was in Transport (32%).

Total Patents Granted in Australia to Australians



- While the total number of Australians granted a patent in Australia has declined since 2004, as a proportion of the total patents granted, the percentage of patents granted to Australians has increased over the same period to approximately 11 per cent.

Revealed Technological Advantage (RTA)¹ for Australians Patenting in Australia

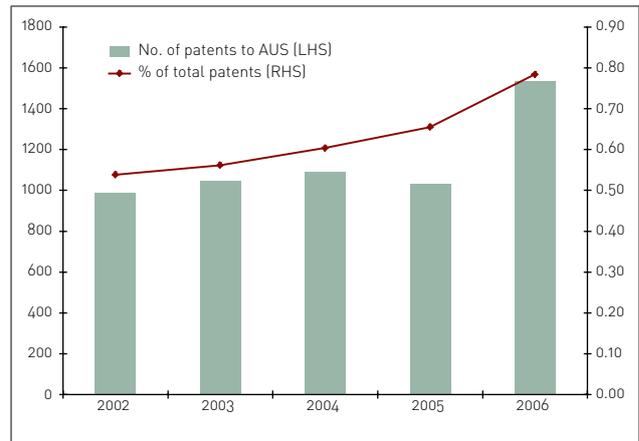


- The chart shows trends in the Revealed Technological Advantage (vertical axis) for the top six Australian technological areas. It reveals that while Civil Engineering, Building and Mining has generally been Australia's leading area of advantage, Handling and Printing has increased in importance since 2002.
- While Space Technology and Weapons is among the top six Australian technological areas in terms of RTA, the absolute number of grants of this technology group is relatively low.

¹ Revealed Technological Advantage (RTA) indices indicate the strength of Australians in a given technology relative to the rest of the world. An index number of greater than 1 means that Australians patent more intensively in a given technology area than the rest of the world. The higher the index, the higher is the patenting intensity.

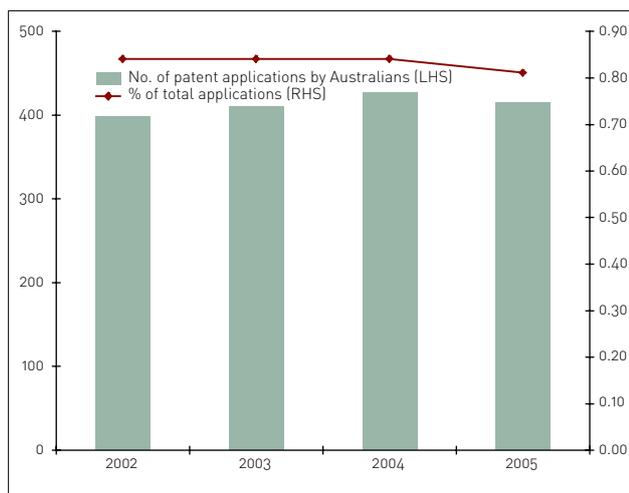
UNITED STATES PATENT AND TRADEMARK OFFICE (USPTO)

Patents Granted to Australians by the USPTO



INTERNATIONAL IP PROTECTION ACTIVITY

Estimated OECD Triadic Patent Applications by Australians*



*2006 data not yet available

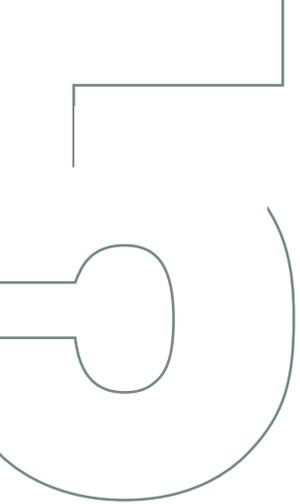
- Less than 5% of all patent applications in the world are simultaneously filed at the three main patent offices, that is, the US, European and Japanese patent offices. The 'triadic' applications generally represent the most commercially valuable inventions.
- Currently, there are no official records of the number of Australians who submit a triadic application, but estimates from the OECD indicate that approximately 400 triadic patent applications were lodged by Australians in 2005.
- Over the period from 2002 to 2005 estimated applications by Australians remained fairly constant between 0.80 to 0.85% of total OECD applications.

- In 2006, Australians ranked 10th for patents granted to non-US nationals by the USPTO, up from 12th in 2004.
- In contrast to trends at the Australian Patent Office, the number of patents granted to Australians at the USPTO rose significantly in 2006 compared with the previous 4 years.
- Currently, Australians account for approximately 0.8% of all patent grants issued by the USPTO. There was a significant increase in the number of grants in 2006 compared with the previous 4 years. The percentage of grants to Australians by the USPTO has been consistently increasing since 2002.
- It is not clear whether the increase in grants between 2005-06 is because of a rise in applications to the USPTO or because of a higher success rate, since the USPTO does not publish details on grant rates.
- There has been a trend increase in the number of Australians applying to the USPTO for patents over the last half century.

USPTO Patents Granted to Australians, Top 5 Technology Groups

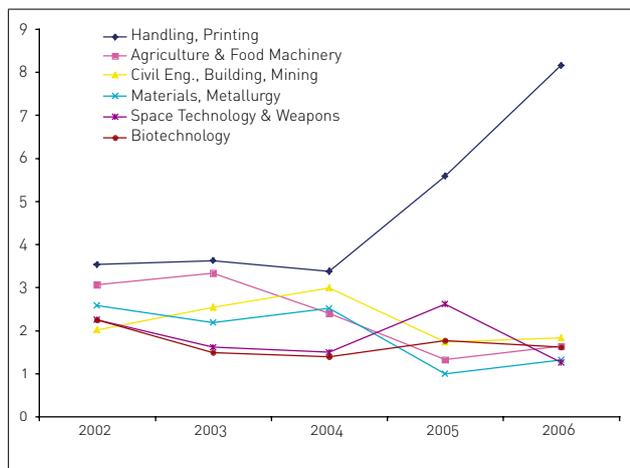
Technology Groups	2002	2003	2004	2005	2006
Handling, Printing	126	121	108	172	321
Information Technology	20	33	59	69	142
Analysis, Measure, Control	35	63	56	49	72
Medical Engineering	51	61	45	53	70
Consumer Goods, Equipment	73	67	64	58	61

- The main technology areas in which Australians are acquiring patents in the United States are broadly the same as those in which they are acquiring patents in Australia, that is: Handling and Printing; Consumer Goods and Equipment; Information Technology; and Medical Engineering.



- As in the Australian situation, Handling and Printing grants to Australians by the USPTO is dominated by a single Australian company.
- The next main technology area is Information Technology. This area has seen the highest percentage rate of growth in the number of all patents granted since 2002 [overall 610%, 106% since 2005].

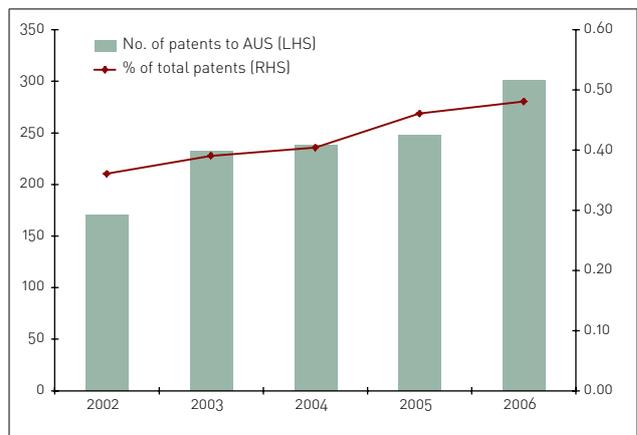
Revealed Technological Advantage (RTA) for Australians Patenting in the USA



- The RTA index for Handling and Printing is significantly higher than that for all other technology groups.
- As with the Revealed Technological Advantage index data from the Australian Patent Office, the USPTO data show that Australians have a RTA in technology areas such as Handling and Printing; Agriculture and Food Machinery; Civil Engineering, Building and Mining; and Space Technology and Weapons.
- Unlike the Australian data, the USPTO data suggest Australians have RTA in Biotechnology, and in Materials and Metallurgy for patents in the USA.

EUROPEAN PATENT OFFICE (EPO)

Patents Granted to Australians by the EPO



- Australians ranked 17th for patents granted by the EPO in 2006 and 5th of countries outside the European Union, the same position as in 2004.
- As with the USPTO data, there has been a trend increase in patents granted to Australians by the EPO. Patents granted to Australians by the EPO grew by 77.5% between 2002 and 2006.
- While this may be indicative of a growth in interest in European markets by Australians, some of the absolute growth in this activity will be a substitute for directly filing at the EPO rather than at the national European offices.

EPO Patents granted to Australians, Top 5 Technology Groups

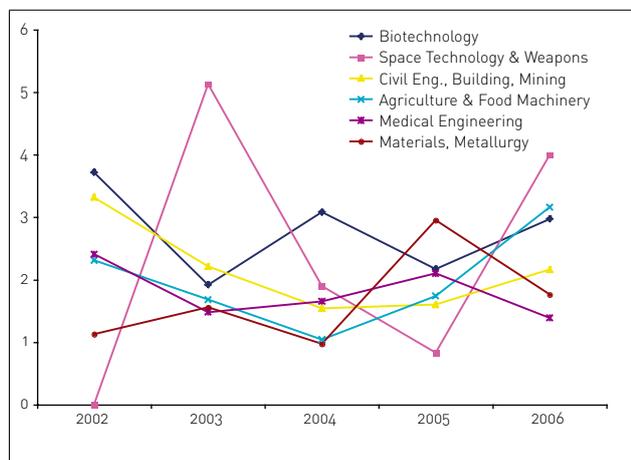
Technology Groups	2002	2003	2004	2005	2006
Handling, Printing	10	13	18	25	34
Biotechnology	10	7	15	14	27
Medical Engineering	17	18	25	36	23
Civil Eng., Building, Mining	15	17	14	14	21
Analysis, Measure, Control	13	13	11	14	14

- Three of the top five technology groups for patents granted to the Australians by the EPO are also recorded in the USPTO patent grants. However, the absolute numbers of patents granted are considerably lower in Europe than the United States.
- This fact may reflect the higher costs of patenting in Europe; the more restrictive examination standards in Europe; or a relatively greater commercial interest in the US market.



- As with the situation in the United States, Handling and Printing has experienced a relatively high rate of growth in patents granted to Australians by the EPO. Unlike the US situation, Biotechnology is one of the top five technology areas for patents granted to Australians in Europe.

Revealed Technological Advantage (RTA) for Australians in EPO



- The smaller numbers of grants means that the patterns of RTA at the EPO may be significantly influenced by any variations in the reported data. Nevertheless, the list of the top six technologies in which Australians appear to have a RTA is broadly the same as for the USPTO, the exceptions being Handling and Printing, which does not appear in the EPO list, and Medical Engineering, which does.

FURTHER INFORMATION CONTACT:

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FORMS OF IP PROTECTION

A **Patent** is a right granted for any device, substance, method or process, which is new, useful, and must be inventive. Patents are classified into 30 broad **Technology Groups** (for more information see www.ipaustralia.gov.au/about/statistics.shtml).

Innovation patents are a relatively fast, inexpensive option to protect inventions that are considered innovative, but not sufficiently inventive to meet standard patent requirement. **Trade marks** are marks (word, letter, logo) that are used to distinguish goods and services. **Designs** refer to a new, distinctive shape, configuration, or pattern which gives the product a unique appearance, and is related to an industrial or commercial use. **Plant Breeder's Rights** are used to protect new varieties of plants or its reproductive material. **Triadic Patent Families** are patent applications to the European Patent Office and the Japanese Patent Office, of patents granted by the US Patent and Trademark Office, and are counted from the earliest application date. **Revealed Technological Advantage (RTA)** compares the fraction of Australian patents in a particular Technology Group as a percentage of total Australian patenting activity, with the fraction of all patenting activity in that Technology Group as a percentage of all patenting activity [AU patents in TG/all AU patents]/All patents in TG/all patents]. A value >1 indicates that Australians have a greater proportion of patenting activity (greater patenting intensity) in that Technology Group relative to total patenting activity.

Note: Due to variations in the counting and collating of patent statistics, the figures included should be considered as a guide only.

Sources: Intellectual Property Research Institute of Australia; IP Australia; US Patent and Trademark Office; and European Patent Office.