# INDUSTRY COMMISSION

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- Although the change in patent terms was not in Australia's interest, Australia has gained much more from other measures in the Uruguay Round than it has lost from extending patent terms. Accordingly, agreeing to the extension of patent terms may have been in Australia's interest if it was necessary to secure other gains from the round. However, this paper is in no position to judge the extent to which it was necessary in this instance.
- Because Australia is a strong net importer of IP, it will rarely be in Australia's interest to protect IP more than international agreements require.
- The political economy

## EXTENDING PATENT LIFE: IS IT IN AUSTRALIA'S ECONOMIC INTERESTS?

#### 1 Introduction

In 1994, the Agreement on Trade Related Aspects of Intellectual Property Rights (the TRIPs Agreement), arrived at as part of the Uruguay Round of international trade negotiations, substantially increased the level of intellectual property (IP) protection available internationally (see Box 1). It did so by raising both minimum levels of IP protection and the level of enforcement which participating countries must provide. In contrast to some of the other outcomes of the Round — for instance the liberalisation of agricultural trade — the outcomes of TRIPs

suppliers who were capable of protecting their IP by means other than patents (for

Table 1: Technology balance of payments, 1990, by type of transfera, (US\$m)

Country	Receipts	Payments	Balance	Receipts to Payments Ratio
Australia	220	277	(57)	0.79
Austria	71	235	(164)	0.30
Belgium	1,879	2,505	(625)	0.75
Canada	755	811	(57)	0.93 -12 TD -0.4984 Tc (Canada) anaA

estimate the 'average' value of each of these kinds of patents (including their declining value over the patent term). In doing so, it was necessary to make various assumptions. Some of these assumptions were necessitated by the poor state of the data kept on intellectual property both in Australia and elsewhere.

While the Australian Industrial Property Organisation (AIPO) has an extensive data base on patents and patent applications, it has only limited data on the number

#### Patent applications and grants

#### In Australia

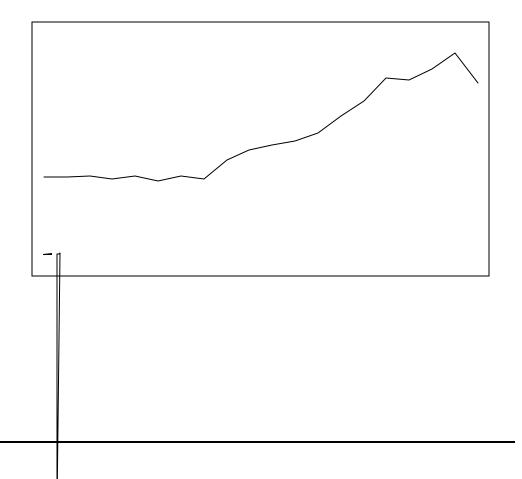
Published data relating to patent applications by country of residence of the applicant were obtained from the World Intellectual Property Organisation (WIPO). This was supplemented by data from the Australian Industrial Property Organisation (AIPO)

#### In Australia and overseas

Details on the number of Australian-owned patents in force overseas are unavailable. But data are available on the number of applications for overseas patents lodged by Australians over the period 1975 to 1990<sup>5</sup>. In Figure 5, the data have been extrapolated to 1994, and graphed alongside data relating to the number of applications for Australian patents lodged by overseas residents.

It is evident from these results that the number of patents issued abroad to Australian patent holders (the volume of patents exported) has risen strongly since the mid 1970s. Gains from these exports will offset the losses which will accrue from extending the patent term for patents owned abroad (Australian patent imports). Moreover they will grow over time. Estimates of the economic effect of extending patents have taken this trend into account and assumed that it will continue into the future. To the extent that this projected trend over (under) estimates the actual improvement in Australia's balance of technology trade, the estimates appearing in Section 6 will under (over) estimate the cost of increasing patent terms.

Figure 5: Applications for imported and exported patents, 1975 to 1994

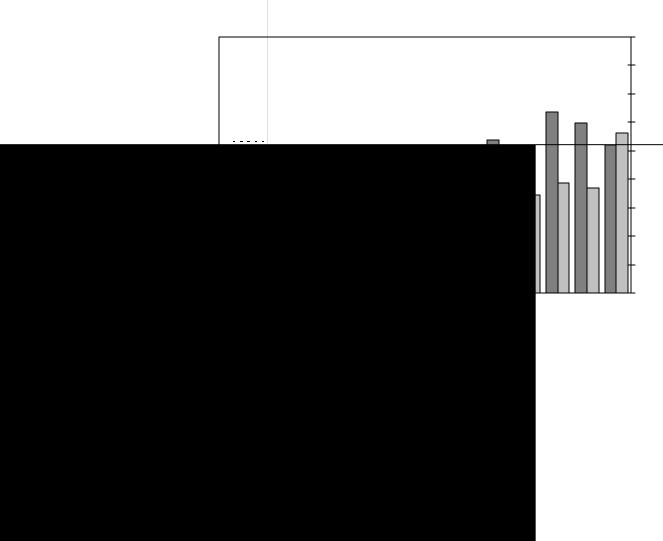


#### The stock of patents in Australia

Trends in the numbers of standard patents sealed, ceased, renewed and in force in recent years are shown in Figure 6. Australia has approximately 75 000 patents in force, and more than 10 000 new patents are sealed each year.

Patents cease at the end of the statutory protection period unless they lapse sooner because their holders fail to renew them. Owners must renew their patents by paying an annual fee on the third and subsequent anniversaries of the day the application for the patent was lodged. The annual fee increases from \$115 to \$790 over the life of the patent. Because patent renewal is not costless, about 8000 patents registered in Australia have been lapsing each year, although the figure was closer to 12 000 in 1993–94.

Figure 6: Standard patents sealed, ceased, renewed and total, 1980-81 to 1993-94



The only Australian data available comes from an Australian Bureau of Statistics (ABS) survey of firms which conducted research and experimental development in Australia in 1992–93.

The ABS collected, among other things, data on patent licence fees and royalties paid and received in 1992–93 (see Table 2), and some data on the number of patent applications lodged and patents granted by respondents between 1 July 1991 and 30 June 1993. From this data one could estimate the annual flow of income to a typical patent holder.

Table 2: Firms conducting R&D in Australia, patent licence fees and

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viability of research and development projects, the value of patents was discounted to negligible levels after about ten years. The representative of one

Discount rate

Table 3: Estimates of standard patents extant in Australia in the 16th and 20th year from year of application<sup>a</sup>

\$A98 905.65. As mentioned above, this scenario also assumes that the annual unit value of Australian owned patents licenced overseas (

Table 4: Estimated financial impact on Australia, and on Australian

### 7 Conclusions

## The political economy of IP seems weighted in favour of net producers/exporters of IP

It was suggested above in Section 2 that the political economy of IP protection producer aned gainst ecosumcer.PTh re issome evidence2 that the political economy of interaction Drainos).Pwas

it will harm far more countries than it will help, it is unfortunate that it was not possible to develop a coalition of interests sufficient to resist this move.

## Improving information

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Table A3: Estimates of standard patents extant in Australia at 31 December 1994

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Table D2: Estimated annual cost to Australian users of Australian owned patents of extending statutory patent lengths (\$m^a)

Year	Base	Case <sup>b</sup>	Cas	e 2°	Cas	e 3 <sup>d</sup>	Cas	e 4 <sup>e</sup>	Cas	se 5f
	W	P	W	P	W	P	W	P	W	P
1995	4.9		4.9		8.1		8.1		12.1	
1996	9.2		9.2		15.3		15.3		22.9	
1997	13.6		13.6		22.7		22.7		34.0	
1998	17.5		17.5		29.2		29.2		43.8	
1999	17.6		17.6		29.3		29.3		43.8	
2000	18.4		18.4		30.7		30.7		45.9	
2001	18.9		18.9		31.5		31.5		47.1	
2002	18.5		18.5		30.9		30.9		46.2	
2003	18.3		18.3		30.5		30.5		45.6	
2004	18.1		18.1		30.1		30.1		45.1	
2005	17.6		17.6		29.4		29.4		44.0	
2006	16.9		16.9		28.2		28.2		42.2	
2007	16.7		16.7		27.8		27.8		41.6	
2008	15.9		15.9							

## **REFERENCES**

ABS (Australian Bureau of Statistics) 1995,