

# Patent infringement in Australia: Results from a survey

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**Introduction**

**What we know**

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## Introduction

- For patents, enforceability matters – even if licensed, sold, joint venture
- Ultimately – it's the right to exclude that does the job to ensure patents provide incentives  
(backwards induction)
- Signal? – may not be most efficient way
- Tail that wags the dog (fear of litigation)

## What we know - patchy at best

- seizures of infringing goods by customs (OECD 2008)
  - not useful for patents
- surveys of industry association members (AiG 2006)
  - self-interested (?)
- surveys of lawyers (ACIP 1999; Dent & Weatherall 2006; AIPLA) – truncated
- cases filed with the courts (Lanjouw & Schankerman 2003; Lunney 2004; Bessen & Meurer 2008; Rotstein & Weatherall 2007)
  - even more truncated!

## **Best source is *representative* survey of patent holders.**

- Kingston (2000) survey of 549 SMEs
  - 15% response rate
  - 67% infringement
  - Biased towards finding infringement (wording)
- Rodwell et al (2007) survey of 143 SMEs in certain industries
  - Undisclosed response rate
  - 27% infringement
  - Undisclosed bias
- Patval-EU (2007) survey of 9,000 inventors
  - Not representative – big entities
  - Not ask copying/infringement questions

## Our surveys

### (1) Mail-out questionnaire

- All Australian inventors on patent applications (=31,313)
- Inventors – better memory than corporate employees
- Australian patent office 1986-2005
- Not just about enforcement  $\Rightarrow$  minimise self-selection bias
- 69% response rate (of valid addresses) (= 3,736/5446)
- Adjust for response bias (based on year, tech, grant, owner type)

### (2) Telephone survey

- All those ‘yes to copying’ & traceable phone number in mail-out survey (=354)

## Basic findings

- 28% inventions subject to copying
- Copying related to value of invention
- Owners often rely on customers, suppliers, colleagues to detect infringement
- 1/2 sent a letter to cease/desist
- letters to cease/desist effective in 4/10 cases
- Reasons not enforce incl. costs, the size of the infringer and whether infringer OS
- uncertainty about the validity of patents is less important than assumed

**Note: Use common term 'copying' in survey not technical terms 'infringement' or 'alleged infringement'**

## Incidence of (alleged) copying by application status at April 2007

<b>Copying status</b>	<b>Granted (%)</b>	<b>Total (%)</b>
Not aware of copying	67.3	71.3
Aware of copying	32.3	28.3
Sent infringement letter	18.1	14.1
Not sent letter	13.0	13.5
Unsure	1.0	0.9
Total	100.0	100.0
<i>Est. number (scaled up to represent the population)</i>	<i>20,512</i>	<i>31,313</i>

## Response(s) to letter of infringement

<b>Response to letter</b>	<b>Granted (%)</b>	<b>Total (%)</b>
Agreed to license/cross license, Stopped copying	38.5	37.4
Temporarily stopped copying, Ignored our letter(s), Alleged our patent was invalid	60.0	60.8
<i>Percentage sending letter</i>	<i>100.0</i>	<i>100.0</i>

## Incidence of copying and letter sending

	Aware of copying	Sent letter claiming infringement
	% of inventions	% of inventions
Large company	21.2	9.8
SME	31.4	18.5
Public research organisation	18.1	4.7
Individual	28.7	11.6
I Electricity/ electronics	30.5	12.8
II Instruments	23.8	9.3
III Chemicals, pharmaceuticals	18.7	5.2
IV Process engineering	26.7	16.2
V Mechanical engineering	29.9	14.4
VI Other	31.6	17.8
1986-1990	36.1	22.4
1991-1995	33.9	18.4
1996-2000	28.6	13.1
2001-2005	21.1	8.4
<b>TOTAL</b>	<b>28.3</b>	<b>14.1</b>

## Source(s) of information about the copying

	<b>% of inventions</b>
Sale by someone else	36.8
Someone else's catalogue	23.0
From a colleague	34.6
See at a trade fair	8.8
From customers and suppliers	37.9
Other – incl proactive searches	27.0
<i>Total (who reported copying)</i>	<i>100.0</i>

## Why not send a cease/desist letter?

- Not one single cause
- For businesses & PROs: 3 main reasons = cost; infringer overseas; infringer too big.
- For individuals : cost
- ‘Triviality’ of copying least likely for SMEs (⇒where SMEs hold patents, they are central to business[?])
- 1/4 cite fact that infringer is OS
- Fear of invalidity not a big issue (4%)
- Median cost of advice and drafting letter =A\$1,000

## What affects incidence of copying, *holding other factors constant*?

- Commercial value of invention (+)
- the grant status (+)
- technological area (instruments, chemical and pharmaceuticals have the lowest rate of copying)
- Owner – not important *once account for these other things*

**What affects incidence of sending letter given copying occurs, *holding other factors constant?***

- Process engineering most likely; chemicals and pharmaceuticals the least
- Commercial value the invention
- Owner – not important once account for these other things

**What affects filing given sent a letter, *holding other factors constant?***

- Electricity and electronics, instruments the least likely
- Commercial value the invention
- Owner – not important once account for these other things

## **How many instances where court proceedings filed?**

- 792/31,313 inventions made 1986 – 2005 were subject of a court filing  
*or* 2.5 per cent of all applications  
*or* 8.9 per cent of applications over which an allegation of copying had been made  
*or* 0.53 per cent of the sum of patents in-force each year.

## Reasons not to file court proceedings

	Number of responses	%
Potential gains didn't justify the cost	88	56
Not worth damaging the relationship	4	3
Would take too long	33	19
Uncertain the patent's validity would be upheld	12	7
No response	62	
<i>Total</i>	<i>159</i>	<i>100</i>

Median length of litigation: 12 months

Median cost of litigation: \$160,000.

*Note: figures would include cases that did not go all the way to court.*

## Pulling it all together: how problematic is patent enforcement?

	Approx. number	%
Total Australian inventions 1986-2005	38 000	
Granted or pending (by April 2007)	29 900	100
Aware of copying	8800	30
Sent a letter	4800	16
Licensed or stopped copying	1900	6
Not stop copying	3000	10
Think too small	1200	4
Think patent invalid /not think infringing	1400	5
Don't know	300	1
No letter sent	4000	13
Too costly/infringer too big	3200	11
Infringement trivial/used other enforcement strategy	700	2
Other	60	0

## Policy implications?

- **Presumption of validity:** no evidence that uncertainty about the patent validity was a significant factor in decision-making
- **Irrational applications?** What to do about our 3200 cases where there *was* a patent and copying *was* detected, but no letter was sent owing to concern about the cost?
- **Cost:** are there ways to extend access to dispute resolution to a larger group of those suffering non-trivial infringement issues?
  - What are the implications for specialist courts/judges?
  - Or other, non-patent options to support small-scale innovation?
- **Infringements from overseas?** What about customs-level enforcement?  
Inter-governmental dialogue?

## The flip side:

- ~ 70 per cent of inventors *not* aware of copying
- More than half the time where there was an awareness of copying, a letter **was** sent
- ~ 4/10 letters **successful**

*THANK-YOU*