

Patent infringement in Australia: Results from a survey

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Introduction

What we know

Our surveys

Basic findings

Pulling it all together

Policy implications

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 over life time
- Copying related to value of invention
- Owners often rely on customers, suppliers, colleagues to detect infringement
- ½ 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

Copying status	Granted (%)	Total (%)
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

Response to letter	Granted (%)	Total (%)
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
TOTAL	28.3	14.1

Source(s) of information about the copying

	% of inventions
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	31,000	
Granted or pending (by April 2007)	24,600	100
Aware of copying	7,300	30
Sent a letter	4,000	16
Licensed or stopped copying	1,500	6
Not stop copying	2,400	10
Think too small	1,000	4
Think patent invalid /not think infringing	1,200	5
Don't know	300	1
No letter sent	3,300	13
Too costly/infringer too big	2,600	11
Infringement trivial/used other enforcement strategy	600	2
Other	50	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 2,600 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