

Intellectual Property and software patents

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Patent & Trade Mark Attorneys

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Amazon 1-click

Overview

1. Software patents pros & cons
2. Why patents?
3. What does a patent look like?
4. What is needed to get a patent
5. Fast moving technologies
6. Can software be patented?
7. The case of Uniloc
8. Software patents around the world
9. What can a software patent look like?
10. Is it worth patenting?
11. Other IP
12. Patent attorneys

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1. Software patents : cons

- | | |
|--|---|
| 1. Software patents pros & cons | • Cost and loss of R&D funds |
| 2. Why patents? | • Copyright |
| 3. What does a patent look like? | • Trivial patents |
| 4. What is needed to get a patent | • Lack of patent application disclosure |
| 5. Fast moving technologies | • Legal constraints |
| 6. Can software be patented? | • Patent infringement |
| 7. The case of Uniloc | • SME disadvantage |
| 8. Software patents around the world | • Software patents are not useful |
| 9. What can a software patent look like? | |
| 10. Is it worth patenting? | |
| 11. Other IP | |
| 12. Patent attorneys | |

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1. Software patents : pros

1. Software patents pros & cons
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- Promotes development
 - Copyright Limitations
 - Public disclosure
 - Protection
 - Economic benefit
 - Patent challenges
 - International law

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2. Why patents?

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1. It's a good idea
 2. Countries are part of a global community

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2. Why patents? – It's a good idea

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- “We have among us men of great genius, apt to invent and discover **ingenious devices** ... if provision were made for the works and devices discovered by such persons, so that others who may use them could not build them and take the inventor's honour away, more men would then apply their genius, would discover, and would build devices of great **utility** and benefit to our commonwealth”

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2. Why patents? – It's a good idea

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- Society benefits:
 - encourages technological advance for the good of society, by rewarding inventors for investing in R&D
 - e.g. pharmaceuticals
 - encourages inventors to fully disclose and share their inventions.

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2. Why patents? – Global community

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- International trade rules:
 - World Trade Organisation
 - free trade, mutual best interests of member states
 - Trade-Related Aspects of Intellectual Property Rights (TRIPS)
 - agreement by member states on minimum IP recognition standards

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2. Value of patents

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- **Sword** – patents used against infringers to require either:
 - a royalty payment
 - that the infringer stop infringing
 - **Shield** – patents used as protection against competition
 - dissuade competitors with implied threat of litigation
 - competitors see that entering your market niche is risky
 - **War chest** – patents used in negotiations and brought to table as trading items
 - file to increase the valuation of your company & attract capital investment

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3. What does a patent look like?

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 12. Patent attorneys
- Technical part
 - Legal part

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3. What does a patent look like?

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- A clamp including two elongate members providing a pair of clamping jaws, wherein the members are pivotally moveable relative to each other about a pivot axis between the members for the jaws to move between an opened and a closed position, a resilient means including opposite portions respectively applying a biasing force to the members to bias the jaws towards their closed position, wherein the relative pivotal movement of the members etc.

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4. What is needed to get a patent?

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- Patentability

What is an invention that is worth protecting?

1. Patentable subject matter
2. Industrial applicability
3. Novelty
4. Inventive step

4. What is needed to get a patent?

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- Patentable subject matter
- Novelty
- Inventive step

5. Fast moving technologies

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- Patent Office
- Courts
- Laws

5. Fast moving technologies

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- Can software be patented?

6. Can software be patented?

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Does it fit within the statutory framework?

- Is it simply a process that could be done mentally?
- What is the output?
- Is there a product?

Patent eligibility is linked "to the age of iron and steel at a time of subatomic particles and terabytes"

7. Microsoft v Uniloc

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- Antipiracy software
- Allegedly infringed in Microsoft's Windows XP and some Office programs
- Microsoft ordered to pay US\$388 million in damages
- Amount of damages awarded currently under appeal, but not questions of validity/infringement

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- "I am sceptical of software patenting in general," Nic Suzor, from Electronic Frontiers Australia, says. "While not wanting to comment on the Uniloc case ... I can say that people have increasingly been using frivolous software patents to get windfall profits for **trivial inventions.**"

- Sydney Morning Herald

8. Software patents around the world

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- Australia
- US
- Europe

Software patents in Australia

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Australian Patents Act Section 18:

An invention is patentable...provided it is a "manner of manufacture"

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- *Manner of Manufacture:*
 - an artificially created state of affairs of utility in the field of economic endeavour
- *Artificially created state of affairs:*
 - A concrete, tangible, physical or observable effect
 - Includes a physical effect in the form of a change in state or information in a part of a machine
 - Does not include a "mere scheme, abstract idea, mere intellectual information"

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Software patents in Australia

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More recently:

- *Invention Pathways* (July 2010, Australian Patent Office):

...the "concrete effect or phenomenon or manifestation or transformation" referred to must be one that is significant both in that it is concrete but also that it is central to the purpose or operation of the claimed process or otherwise arises from the combination of steps of the method in a substantial way...". (Emphasis added.)

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Software patents in Australia

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... wherein the holding of information in an updateable form and production of reminders in a machine is merely a matter of convenience and does not result in a substantive effect that can be correctly considered to result in patentable subject matter." (Emphasis added.)

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Software patents in the US

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USC §101:

“Whoever invents or discovers any new and useful process, machine, manufacture or composition of matter...”

But:

abstract ideas, laws of nature, and physical phenomena are not patentable

Software patents in the US

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Bilski v Kappos:

- Method of hedging risk in the sale of commodities
- “Machine or transformation” test (i.e. method/process tied to a particular machine or transforming a particular article) an “important clue”, but not alone determinative of patentability
- “merely incidental extra-solution activity does not confer patentability”

Software patents in the US

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Research Corp. Technologies v Microsoft Corp. (Dec 2010):

- halftoning
- patentable

“inventions with specific applications or improvements to technologies in the marketplace are not likely to be so abstract” to be unpatentable.”

Software patents in the US

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CLS Bank v. Alice (March 2011)

- minimising risk by using an intermediary to facilitate simultaneous exchange of obligations
- not patentable:
“a computer system merely ‘configured’ to implement an abstract method is no more patentable than an abstract method that is simply ‘electronically implemented.’”

Software patents in Europe

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European Patent Convention

Article 52:

Schemes, rules and methods for performing mental acts, playing games or doing business, as well as computer programs *as such* are excluded from patent protection.

Software patents in Europe

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- *IBM* decision (1997): “Technical effect” approach
 - If a claim has a “technical character” it is not a computer program *as such*.
- *Microsoft* decision (2003): “Any hardware” approach
 - If a claim directed to or makes use of any hardware (e.g. memory) it is not a computer program *as such*.

Software patents in Europe

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Patentability under Article 52, however, not the complete story

“If a claim related to a computer program defines or uses technical means it is not excluded from patentability as a computer program 'as such'.

However, only those aspects of a claim which contribute to its technical character are taken into consideration for assessing novelty and inventive step.”
(European patent office)

Software patents in Europe

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“The truth of the matter is this: Inventions that use computer programs to provide a business process - not a technical process - are not patentable.”

(European patent office)

9. What can a software patent look like?

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- Specification + claims
 - Different types of claims tailored in order to:
 - satisfy the requirements of the jurisdiction in question
 - capture the most appropriate (potential) infringer

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9. What can a software patent look like?

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- “System or device” claim
 - a programmable apparatus for [performing a function] comprising:
 - means for - [doing a function]
 - etc.
 - “Process” claim
 - a process to be performed on or with the aid of a computer, comprising the following steps:
 - doing [step 1]
 - etc.

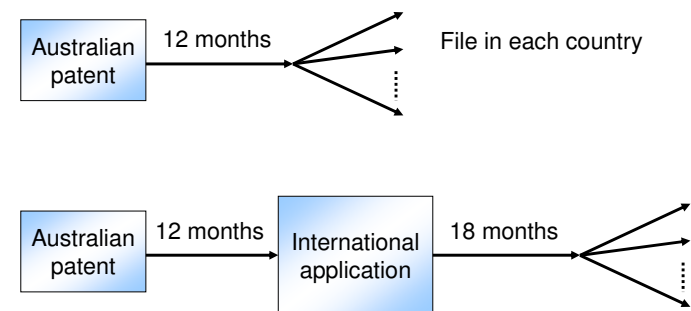
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10. Is it worth patenting?

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- Commercial considerations
 - patenting vs secrecy
 - Budget:
 - What can the business spend money on?
 - Cost of obtaining patent rights
 - Cost of enforcing patent rights
 - Financial backing

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What is the process?



What countries do you file in?

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Ownership

- Who owns a patent?
 - Inventor
 - Employer
 - University
- Assignments
- Licences
 - sole
 - exclusive
 - non-exclusive

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11. Other IP

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- Patents
 - Copyright
 - Circuit layouts
 - Registered designs
 - Trade marks

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Copyright

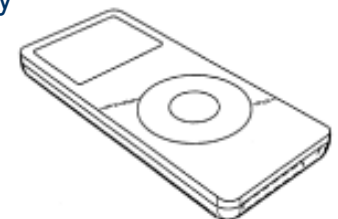
- Idea/expression dichotomy
- Grants the author of an *original* work protection against others copying that work
- Literary work includes “a computer program”
- but ...
 - protects the particular form of expression only – not underlying ideas
 - original – “something more than a mere trivial variation”
 - will not protect against independent creation

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Registered designs

- A registered design provides a monopoly
 - of a limited duration (max. 10 years in Aust.)
 - granted by the government to the owner of a “concept” which determines the appearance of an product
- The owner can exclude others from exploiting the design in a particular country
- Protects appearance, not functionality

AU Registered design 307210
Product: *An electronic device*
Owner: *Apple Computer, Inc*



Trade marks

- A trade mark is a “sign” used to distinguish one traders goods/services from those of another
- Signs = letters, words, names, signatures, numerals, logos, brands, headings, labels, ticket, aspect of packaging, shape, colour or scent
- Rationale slightly different to other IP – protection of trader’s business and of customer
- What are trade marks worth?

Google	--\$66.4 billion
Microsoft	--\$55 billion
Coca-Cola	--\$44.1 billion
Marlboro	--\$39.2 billion

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Trade secrets

- Protection for:
 - confidential information
 - imparted and received under an obligation of confidence
- Where there is
 - an unauthorised use or disclosure
 - and detriment arises
- Does not protect against
 - reverse engineering
 - independent formulation

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12. Patent attorneys

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- What do they do?

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