**UNDERSTANDING INTELLECTUAL PROPERTY**

**by Simon Moss**

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| **Introduction** |

 For several reasons, PhD and Masters by Research candidates should understand the fundamentals of intellectual property. This topic is important because

* you need to be certain that none of your activities infringe the intellectual property rights of other individuals or organizations
* you might want to commercialize your research

 This document summarizes the fundamentals of intellectual property. For more information, you should contact the office of research and innovation, research grants and business development: rgbd@cdu.edu.au. For the relevant CDU policy, visit <https://www.cdu.edu.au/governance/doclibrary/pol-025.pdf>

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| **Summary** |

**What is intellectual property?**

 When people envisage their property they often contemplate specific objects like clothes, vehicles, computers, and houses. But some property, like inventions, designs, phrases, symbols, literature, and music, are inventions of the mind. This property is called intellectual property.

**Why do you need to protect intellectual property?**

 People and organizations like to register and protect their intellectual property, such as their books, music, or inventions, for several reasons. In particular

* they might want to sell or licence this intellectual property
* they might want to prevent other people from utilizing this intellectual property and thus diminishing the value of this property
* they might want to utilize this intellectual property to increase the value of their company or organization—vital if they want to attract grants, for example
* they might want to share this intellectual property with other individuals or organizations.

**Who owns the intellectual property?**

 Typically, employers own the intellectual property created by their employees. So, the university tends to own the intellectual property of staff, unless the relevant executive, usually the deputy vice chancellor of research, agrees otherwise. The university tends to own the intellectual property of visitors if these individuals utilized the property of this university. However, the deputy vice chancellor of research can grant the creators a license to use these works.

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| But fortunately, university students tend to own their intellectual property—if created as their role as students |

**What is the value of your intellectual property or IP?**

The value of your intellectual property is hard to calculate. To estimate this value, you can consider

* the income stream this property will generate—in sales or licences for example
* the cost of developing an alternative
* the value of comparable property
* for further details, see <http://www.ausicom.com/filelib/Realistic_Valuations_of_IP_-_RG.pdf>

 To protect intellectual property, individuals can utilize a variety of kinds, such as trademarks, designs, patents, copyright, and trade secrets. Some kinds need to be registered formally before they can be utilized in courts. This table outlines three of these kinds: trademarks, designs, and patents.

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| Nations | Trademarks | Designs | Patents |
| Encompasses… | * Logos and slogans
* Shapes like the ipod
* Sounds like the ticks in 60 minutes
* Color palettes like 7 11
* Gestures or symbols
 | A configuration, shape, pattern or decoration that confers a unique appearance to products; these designs must be new and distinctive.  | A device, substance, method, or process that is new, useful, and inventive or innovative |
| Duration of coverage in Australia | Indefinite  | 10 years—longer in EU and USA | * 20 years
* 8 years if only an innovation patent
* 25 years for drugs
 |
| Benefits | Nobody in this nation can use your trademark without your permission | Nobody in this nation can use your design without your permission | Nobody can produce, use, or sell your invention in this nation without your permission. Otherwise, they pay you damages or their profits |
| Approximate cost | $300  | $800 | About $30 000 across 20 years |
| Duration between application and registration | Often around 8 months | Often around 3 months | Between a few months and a few years; innovation patents are quicker |

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| **How to register for trademarks** |

To register for a trademark in Australia, complete the following activities.

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| Activity | Details |
| Visit www.ipaustralia.gov.au/trade-marks |  |
| Ascertain whether you want a trade mark rather than other options such as design rights, business names, company names, and domain names. | * For business names and company names, visit the Australian Securities and Investments Commission
* For domain names, visit https://www.auda.org.au
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| From a list of 45 classes, specify all the goods and services on which you plan to apply this trademark. The trademark can apply only to these goods and services. | * The Trade Marks Classification Search can be used to identify relevant goods and services.
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| Use search tools to assess whether similar trademarks have been registered  |  |
| Submit an online application for either $330 or $250.  | If you pay the extra cost* an examiner can assess your trademark before you submit your final application
* you can then receive feedback from the examiner and speak to this person
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| If no complications arise, you should receive your trademark within about 8 months. After this time, nobody is permitted to use this trademark, unless you licence this right |  |
| You need to renew your trademark every 10 years | Trademarks that are renewed can last indefinitely. However, if you stop using the trademark, other agencies can challenge and then use this trademark |

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| **How to register designs** |

 To register a design, complete these activities.

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| Activity | Details |
| Decide if your intellectual property is a design  | A design is a shape, configuration, pattern, or ornamentation that bestows a unique appearance to an object |
| Conceal your design until after you register this design | Otherwise, the design will not be regarded as new |
| Search for this design to ensure your design is new | You can Google “AU Designs Data Searching” or seek a professional to help you |
| Prepare precise drawings or photographs of your design | Include several views, such as from the front, side, and back.  |
| File your application with IP Australia | * You could also include a 3D PDF
* You can only change your design marginally after the design is filed; but, designs that are changed appreciably may not be protected
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| **How to register patents** |

 In Australia, many people and organizations submit patent applications. Indeed, each year, 30 000 or so patents are approved. To register patents in Australia, complete the following activities. Nevertheless, you should seek professional assistance before you apply.

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| Activity | Details |
| Decide whether your invention could be a patent | * To apply for a standard patent, your invention must include an inventive step—a feature that is not obvious to someone with knowledge and experience in the field and is thus more than merely an incremental advance
* To apply for the other kind of patent—an innovation patent—your invention must include entail an innovative step—an original and useful feature—but not necessarily an inventive step.
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| Decide whether you want to patent your invention | * Patents are expensive and can, over 20 years, cost $30 000. Apply for patents only if the commercial returns are likely to outweigh the time, effort, and financial costs
* If you cannot afford a patent, you might consider trade secrets
* Or you could use or publish the invention widely. If you use and publish the invention, nobody else can secure a patent on this invention.
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| Conceal your invention until your patent is approved | You can receive a patent only if your invention is new. If you discuss the patent with anyone else, this person should sign a confidentiality agreement. |
| Visit www.ipaustralia.gov.au/patents |   |
| Ascertain whether you patent is original | At <https://www.ipaustralia.gov.au/patents>, use the “Search patents” function. You can also use Google Patents.  |
| Decide the type of patent for which you want to apply.  | * Standard patents last 20 years and are quite expensive.
* Innovation patents last 8 years.
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| Construct your patent document. You need to specify* Title and background
* A summary
* A detailed description of how to produce and use your invention
* Claims
* Drawings
 | * If the description is not detailed enough, other organizations can implement something similar without breaching your patent. But, if the description is too detailed, other organizations can readily copy your patent after 20 years
* The claims specify which activities would constitute an infringement
* The claims usually begin broad—but organizations can challenge these broad claims
* The subsequent claims become increasingly specific—claims that do not prevent all activities but are not as likely to be challenged
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| You could submit a provisional application before the final application. You must then submit the final application—and seek examination—within five years.  | * An early submission diminishes the likelihood that anyone else will submit a similar patent. Your patent will override their patent once approved.
* You can also submit updated provisional applications too
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| After the final application is submitted, an examiner assesses whether the patent achieves the relevant criteria.  | * Examinations are conducted within about 12 months
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**What activities cannot be protected by patents**

 The range of patents has changed over the years. You could not previously receive patents for algorithms, formulas, or software. But, if these algorithms, formulas, or software are related to a specific application, patents are possible.

 Typically, data, therapeutic interventions, and business processes are not protected by patents. But, the style could be protected by trademarks; the interface could be protected by design rights; and the writing could be protected by copyright. However, a technology that relates questions to answers could be protected with a patent.

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| **How to register in other nations** |

 Trademarks, designs, and patents apply only in the nations in which the applications were submitted. To register in another nation, you can either

* simply locate the intellectual property webpage for each of these nations separately
* utilize other systems, such as the Madrid System. These systems can be used to lodge applications to many nations. However, these international systems do not offer all the features, do not enable you to submit to all nations, and do entail some risk. If problems arise in the intellectual property in your home nation, your intellectual property in all other nations tends to be relinquished.

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| **Copyright** |

**Benefits of copyright**

 Copyright enables authors to own their articles, novels, poetry, movies, songs, computer software, visual art, plays, choreography, and architecture but not ideas. Specifically, copyright enables authors to determine whether, and under what conditions, this work may be used by other people or organizations. Furthermore, creators are granted moral rights: their work needs to be attributed if used and not distorted in a way that dishonours them—called moral rights.

**How do I ensure my work is copyrighted?**

 In Australia, you receive copyright over your work automatically. You do not need to register.

* The © is merely a reminder the work is copyrighted and clarifies who owns the copyright
* To illustrate copyright, a CD of 12 songs includes 12 sound recordings, 12 musical works or manuscripts, 12 sets of lyrics, and the album artwork—all of which are protected by copyright.
* Australian copyright law applies to actions in Australia, even if the material was created or first published elsewhere

**How long does this copyright last?**

 In Australia, copyright usually lasts the life of the author plus 70 years.

**Exceptions from copyright**

 According to the Copyright Act 1968, people can use copyright material without permission in specific circumstances, such as

* to write a review
* to write parody
* to report news, and
* to conduct research.

This provision is called fair dealing. As this provision implies

* you can use copyright material without permission to conduct research
* you might, for example, present copyright material to participants and ask these individuals to evaluate the material
* however, you cannot publish copyright material without permission. Publication is not research, but merely a product of research

**Complications**

Sometimes, publishers might demand that authors transfer copyright ownership to these publishers. In these circumstances, candidates should seek advice from their supervisors—or from the CDU library: Visit://libguides.cdu.edu.au/copyright or contact copyright@cdu.edu.au