**The Patent System**

**Step 1 – Who can Apply? Page 311**

1. **S29(1)** – Any person can apply for a patent but a patent may only be granted to an eligible person under s15(1) and an application should nominate such a person as the ultimate recipient of any grant.
2. **S15(1)** – The potential grantee must be a person who:
	1. Is the inventor
	2. Would, on the grant of a patent for the invention, be entitled to have the patent assigned to them;
	3. Derives title to the invention from either of the above;
	4. Is the legal representative of a deceased person who falls into one of the previous categories.
3. **S31 & 63** – It is possible to make joint applications and hold a patent jointly.

**Step 2 – The application process ? Page 311**

**Provisional Application**

1. **S29(2) – (4) –** The application must be either a provisional application accompanied by a provision specification or a complete application accompanied by a complete specification.
2. **S40(1)** – A provision application is made where the applications wishes to secure a ‘priority date’ as soon as possible.
	1. A provisional specification need only ‘describe the invention’ with the application then having 12 months in which to lodge a complete application in the relation to the same manner (s38).

**Complete Specification**

1. **S40(2) – (4)** - A complete specification must provide more detailed information. It must fully describe the invention including the best method of performing it known to the applicant, and end with a claim or claims defining the invention.

 **International Applications**

*Goto Page 313 of the Text*

**Step 3 – Criteria for examination ? Page 317**

S45 and Reg 3.18(2) require the Patent Examiner to Report on Whether the application and specification comply with the Acts requirements including:

1. **s15 –** The person to be granted the patent is eligible.
2. **s29 –** The application satisfies the formal requirements prescribed under s29.
3. **s40 –** The content of the specification complies with the s40 above.
4. **Novel and Inventive -** The invention is a ‘manner of new manufacture’ which is both novel and invention.
	1. **REFER BELOW.**
5. **Exclusion -** The invention is excluded from patentability under s18(2) or the application could be refused under s50.
6. **Double Patenting -** The application contravenes the prohibition in s64(2) on ‘double patenting’

**Step 4 – Determining Validity ? *PAGE 326***

1. S18(1) provides that ‘an invention will be a patentable invention for the purposes of a standard patent’ if it:
	1. Is a *‘manner of manufacture within the meaning of s6 of the Statute of Monopolies’*;
	2. Is
		1. novel, and
		2. Involves an inventive step;
	3. Is useful; and
	4. Has not been the subject of secret use.

**Manner of Manufacture *PAGE 327***

1. Must be a *‘manner of manufacture’* in order to be patentable. The words ‘manner of manufacture’ have come to denote either:
	1. a product which can be produced by following instructions in the patent specification;
	2. or a process or method which similarly, can be used to achieve certain results by following the specification.

*National Research Development Corp v Commissioner of Patents (NRDC Case)*

1. High court suggested that ‘Manufacture’ could be taken to refer to the production of tangible goods because that is its connotation in every speech.
	1. There must be some industrial or commercial trading character about the ‘manner of manufacture’ in order to gain protection.

*Re GEC’s Application*

1. Suggested that processes were also within *‘manufacture’*.

**What is Patentable ?**

***Are agriculture or horticulture processes patentable ? PAGE 330***

* NRDCsuggested that in realm of agriculture andhorticulture there is a danger of confusion between an ‘invention’ and a ‘discovery’ of patentable subject matter.
	+ **Agricultural or horticultural processes can be patented as long as they are novel and inventive**

***Are discoveries patentable ? PAGE 330***

* NRDCReferred to ‘Howard Florey/Relaxin [1995] EPOR 541 finding:
	+ *‘to find a substance freely occurring in nature is a mere discovery and therefore not patentable. However, if the substance found in nature has first to be isolated from its surroundings and a process for obtaining it is developed, that process is patentable’.*

***Are computers programs patentable ? PAGE 333***

* Computer programs that merely ‘recite a mathematical algorithm’ are no patentable subject matter. However,
* If the algorithm is applied to some defined purpose that may amount to a ‘manner of manufacture’.
	+ *IBM Corp v Commissioner of Patents (1991) 22 IPR 417*
		- an invention relating to an improved method and equipment for producing curves images in computer graphics display has been allowed

***Are business methods patentable ? PAGE 334***

* *Welcome Real Time SA v Catuity*
	+ Heerey J agreed with the decision outlined in *‘State Street Bank & Trust Co v Signature Financial Group’* and firmly suggested that business methods were patentable subject matter.
* IP Australia published *‘Patents for Business Schemes’* which make it clear that *“there must be a means for putting the scheme into effect for there to be an artificially created state of affairs with economic significance. A mere scheme with no means of implementation is analogous to a mathematical algorithm and is not patentable per see.”*

***Are human treatments patentable? PAGE 335***

* Article 27(3)(a) of the TRIPS Agreement permits members to exclude from patentability *‘diagnostic, therapeutic and surgical methods for the treatment of humans and animals.’*
* In *Bristol Myers Squibb Co v F H Faulding & CO Ltd*
	+ Full court suggested that *‘the clear preponderance of opinion at the appellate level in Australia was that a method of medical treatment of the human body was patentable subject matter’.*
	+ Cited the main reasons as:
		- Difficultly of drawing a logical policy distinction for allowing a patent for a product but refusing a patent for a method of treatment.
		- Second was that parliament had not expressly excluded treatment method patents in the Patents Act 1990.

***Are drugs patentable? PAGE 337***

* Substances developed for use in treatment remain protectable.
* *Bristol-Myers Squibb Co v Baker Norton Pharmaceuticals Inc*
	+ *‘the requirement of novelty and the ban on methods of treatment of the human body by therapy ... such claims are unnecessary when X is new for then X can be patented by itself ...but if X is old the Swiss Form of claim is said to confer novelty and yet not be a method of treatment ... so the manufacture of an old pill for use in a new treatment is considered novel’*
* The Australia legislation does say that the Commissioner may refuse to grant a standard patent, or revoke an innovation patent, for a substance capable of being used as a medicine where that substance is a mere mixture of known ingredients or a process for producing such a substance by mere admixture – s50(b) or s101B(4).
* A drug composed of existing ingredients may be more than a mere admixture; if a synergistic effect is produced which takes it outside the statutory prohibition.

***Are life forms patentable ? PAGE 342***

* **S18(2) -** It is prohibited, in both relation to standard and innovation patents, to patent ‘human beings and the biological processes for their production.
* *Kirin-Amgen Inc v Board of Regents of University of Washington (1995) 33 IPR 557;*
	+ The decision supports that genetic materials and genetically modified organisms and their products are all patentable in Australia
* Each application must be considered to ensure that it is of direct relevance to an invention which is more than a mere discovery but is a novel, non-obvious and properly disclosed in specification.
* Unfortunately, patent grants are being made in this regard without any thought to the possible environmental, social or ethical implications. The number of biotechnology patents in Australia is increasing and the entire area of patenting living products of biotechnology or patenting biotechnology methods remains extremely controversial despite the fact that scientific exploration in the field is widespread and increasing and there is hope that the benefits of new scientific understand, research tools and techniques etc will outweigh the risks or public concerns.

**Novelty – Page 346**

**Requirement to be New**

1. **S18(1)(b)(i) & s18(1A)(b)(i)** - The need for a manner of manufacture to be ‘new’ finds separate expression in the requirement that any invention claim in a standard patent application or innovation must be novel.
	1. i.e. new is same as novel

**Requirement to be Novel**

1. Novelty is a fundamental requirement of the patent system, since the consideration moving to the public in return for the monopoly is the revelation of something currently unknown. Furthermore, to allow patents for inventions already known and possibly already in use would be to deprive the public of rights previously exercised and would therefore be unjust.
2. Novel is a ground against patentability which may be raised at all stages of patent testing:
	1. At Examination – s45(1) & s101B(2)(b)
	2. Re-examination – s98(1)(a) & s101G(3)(a)
	3. Opposition – s59(b) & s101M(b)
	4. Revocation – s138(3)(b)

***Tests for Novelty – Page 347***

1. **S18(1)(b)** - Act provides that the novelty of any claim is to be assessed *‘when compared with the prior art base as it existed immediately before the priority date of that claim’*
	1. A priority date is secured by lodging a specification and is used for the purposes of comparing the prior art.
	2. **Prior Art –** Novelty is to be assessed by referencing prior art contained in any documentary form anywhere in the world.
		1. *Combination of Prior Art* **-** The prior art can be single documents, or acts revealing the invention, certain patent specifications or a combination of documents or combination of acts which a ‘person skilled in the relevant art’ would treat as a single source.

*Bristol Myers Squibb Co v F H Faulding & Co Ltd*

1. Prior Art **must disclosure essential features of the invention**, and will only destroy novelty if it gives direction *‘which will result in, if the skilled readers follows it, the claimed invention’.*

*Acme Bedstead Co Ltd v Newlands Bros Ltd*

* 1. *Mosaic Prior Art Information* **-** An invention IS NOT to be regarded as lacking novelty simply because someone could have put together all the aspects of the invention from a variety of unconnected sources.
1. **Test for novelty requires an assessment of anticipation – Page 349**
	1. **S7(1) -** Novelty requires an investigation to establish whether the alleged invention had been anticipated by publicly available prior art information .

*Meyers Taylor Pty Ltd v Vicarr Industries Ltd –*

* + 1. *Reverse Infringement Test -*
			1. *‘The basic test for anticipation or want of novelty is the same as that for infringement and generally one can properly ask oneself whether the alleged anticipation would, if the patent were valid, constitute an infringement.*
1. **Publication and use not precluding novelty – Page 352**
	1. S24 sets out matters NOT affecting the validity of a patent –
		1. Showing or use of the invention at a recognised exhibition;
		2. The publication of the invention while a recognised exhibition is being held;
		3. The publication of an invention in a paper written by the inventor and read before a learned society, or published with the inventors consent by or on behalf of a learned society;
		4. The publication of an invention as part of a public trial.

**Inventive Step – Page 355**

1. **S18(1)(b)(ii) –** Requires that the invention involve an ‘inventive step’, and the matter must be considered at examination of the application (s45).
2. **The requirement of inventive step –**
	1. To be patentable in a standard patent the subject matter must not only be novel it must also have an element of invention. It must involve a real advance which is more than a merely ‘obvious’ extension, variation or combination of the prior art which could be brought about by an unimaginative person skilled in the field.

**Inventiveness distinguish from novelty – Page 355**

1. There is no doubt that while the concepts of novelty and inventiveness are separate, they may overlap with each other in that an invention which differs too little from the prior art to be inventive may also have been anticipated.

*In R D Werner & Co Inc v Bailey Aluminium Products Pty Ltd*

1. Something already revealed to the public is not necessarily obvious to those working in the field unless that public knowledge is also part of the ‘common general knowledge’ in the trade.

**Skilled in the relevant art – Page 356**

1. **S7(2) –** An invention is taken to involve an inventive step *‘unless the invention would have been obvious to a person skilled in the relevant art’* in the light of *‘common general knowledge’*.
	1. Australian Patent Office Manual of Practice states that *‘The person skilled in the art will be a skilled but non inventive worker in the relevant field of technology’*

*Elconnex Pty Ltd v Gerard Industries Pty Ltd*

1. *‘Questions of obvious are frequently difficult because it is very easy to fall into the trap of using hindsight. Once an innovation which is useful comes on to the market, there is an inclination not only for lawyers but also for those in the relevant industry to treat it as the norm and as something which might have been easily thought of by any reasonably competent worker in the industry.’*

**Is the invention useful ? PAGE 364**

1. **S18(1)(c) –** The Act provides that an invention must be ‘useful’ in order to be patentable although this may only be raised as a possible ground for revocation in court proceedings (s138(3)(b)).
2. *The purposeful adoption of a form of the invention as would obviously malfunction is not the way to interpret a specification (Washex Machinery Corp v Roy Burton & Co) BUT;*
3. *Rather the claims should be read in the light of the specification as a whole according to what an intelligent person skilled in the relevant art and desirous of making use of the invention would do (Martin Engineering Co v Trison Holdings Pty Ltd)*

**Has there been secret use ? PAGE 366**

1. **S18(1)(d) - Secret use** of an invention by a patentee before the priority date of the relevant claim was a ground for revocation of the patent, but not an opposition.
2. Secret use is defined as ‘*use unknown to the public and not discoverable by the public. This does not mean accidental or experimental use, but use with the intention to keep the information concealed’.*
	1. *Bristol-Myers Co v Beecham Croup Ltd*
3. The point of this provision is to stop a patentee effectively prolonging a de facto monopoly position by first working in secret and then when competitors draw near to the invention, apply for a patent.
	1. *Old Digger Pty Ltd v Azuko Pty Ltd*
	2. *PAGE 366*
4. **Refer to s24 under novelty**
	1. S24 sets out matters NOT affecting the validity of a patent –
		1. Showing or use of the invention at a recognised exhibition;
		2. The publication of the invention while a recognised exhibition is being held;
		3. The publication of an invention in a paper written by the inventor and read before a learned society, or published with the inventors consent by or on behalf of a learned society;
		4. The publication of an invention as part of a public trial

**Step 5 – Who is the owner & has rights to exploit ?**

1. **S13(1) –** The grant of a patent under the Patents Act confers on the patentee the exclusive right to ‘exploit’ the invention.
2. **S67 –** Term of a standard patent is 20 years from the ‘date of the patent’ which is the date of application or filing.

**Inventorship**

1. *Row Weeder Pty Ltd v Neilsen*
	1. *‘a person has entitlement to an invention if that persons contribution, either solely or jointly with others, had a material effect on the final concept of the invention. A secondary issue is whether that persons contribution involved a key inventive step’.*

**Role of employment contract – Page 375**

1. It is the contractual relationships between an employer and employee that will be the basic determinant of matters concerning the ownership of inventions and the right to seek patents, for in the absence of any express or implied provisions on the matter the employer will have no legal claim to an invention.
	1. *Elextrolux Ltd v Hudson*
		1. Whitford J refused to enforce a pre-assignment term against a storekeeper who worked for the plaintiff company which manufactured vacuum cleaners.
		2. The defendant and his wife devised an adaptor to fit a bag to a vacuum cleaner. They did this outside work hours in their own home, applied for a patent and assigned the invention to a third party.
		3. **Court held** unenforceable a clause in the storekeepers conditions of employment which purported to give the employer ownership of any process, invention or improvement relating to almost any article manufactured or not by the company: *the width of the clause was considered to create an unreasonable restraint of trade*.

***Example text of during course of employment***

As concluded in *Spencer Industries Pty Limited v Collins*, *“the issue is whether (the plaintiff) created the invention in the course and scope of his employment”*. Although it is clear in this case that the defendant was not employed to create the invention, there was a definitive intention by the defendant to utilise the plaintiff’s resources to assist in its development. It is in this regard that the plaintiff will have some equitable right over the invention because there is clearly a *“material effect”* provided by the plaintiff. Furthermore, as was considered in *Victoria University of Technology v Wilson & Ors* *“the research which led to the invention arose in the course of employment with the plaintiff”*. The defendant has acknowledged in this instance that they *“developed the idea from using the computer program that controlled the process for pressing of the wine at Poet Shandon (plaintiff)”* and therefore it is definitively apparent that the plaintiff should receive some partial ownership of the defendant’s invention.

**Implied Duty to assign inventions (outside course of normal duties) – Page 376**

1. In the absence of an express contractual provision dealing with the subject of ownership, any invention will impliedly belong to the employer – so long as it arrived at in the course of duties the employee is engaged to perform. It relies on the general notion of a duty of fidelity owed by the employee particularly if they are a senior one.
	1. *Sterling Engineering Co Ltd V Patchett*

*Kwan v Queensland Corrective Services Commission*

1. Two prisoners devised a new method of laminating vegetable matter on a card and obtained a patent.
2. **Court held** that they were not employees of the Commission and that even if they were – the invention was not made in the course of their normal duties.

*Opposite Case (i.e. ruled in favour of employer) – Page 378 of Text*

**Co-owners – PAGE 380**

1. **S31** – Provides that two or more persons may make a joint patent application and each individual joint inventor may seek a patent for their own part or claim together as a single application.
2. **S16(1)(a)** – Where a patent is granted to two or more persons, they take in equal and undivided shares and thus hold the patent as tenants in common.

**Licensing – PAGE 382**

**Infringements – Page**

1. s57 - To establish infringement under the Patents Act the plaintiff will have to prove that he or she is the proprietor or exclusive licensee of a patent currently in force; that the defendant has, without authority, performed an action within the ‘patent area’ [S13(3)] in relation to the invention as defined by one or more of the claims.
2. **Burden of Proof – Page 398**

Burden is on the patentee to establish that the defendants conduct amounts to infringement.

* 1. If the court is satisfied that it is ‘very likely’ that the defendant has used that process, and then plaintiff has made reasonable but unsuccessful attempts to discover what process the defendant has actually used, the burden switches to the defendant to prove otherwise.
1. **‘Pith and Marrow’ approach – Page 399**
	1. A test typically conducted by the courts - originally from *Clark v Adie* - to determine whether the essential elements of the invention, with the less essential parts being omitted or replaced by a ‘mechanical equivalent’ which would perform the same function.
		1. Mainly used to determine the **essential essence of the invention.**
2. **Interpreting the specification – PAGE 398-399**
	1. First step is to decide what the invention consists of and the second is to compare the infringing article or process. Certain principles for this process were outlined in:
		1. *Decor Corp Pty Ltd v Dart Industries Inc*

**Direct Infringement**

1. **Make a Product –** Page 390
2. **Hire, Sell or otherwise Dispose of** – Page 391
3. **Use a product unauthorised –** Page 392
4. **Import –** Page 393

**Remedies – Page 405**

1. **S122(1) –** The remediesgenerally open to a successful plaintiff in patent infringement proceedings are an injunction and either damages or an account of profits at the plaintiffs option.
	1. Injunctive relief to restrain the infringement will always be available in the courts discretion.

**Damages**

1. Restore the plaintiff to *status quo ante* – ‘return to an original position if the infringement had never occurred’.
	1. *General Tire & Rubber Co v Firestone Tyre & Rubber Co Ltd*
2. Court has the option to determine level of damages given.

**Innocent Infringement**

1. **S123(1) –** Damages or an account of profits may be refused by a court where the infringement is innocent, in the sense that at the relevant time the defendant neither knew nor had reason to believe that a patent existed for the invention.

**Defences – Page 406**

1. **S123** – Patent rights are property rights and a lack of knowledge that an invention is protected by a patent is **not a defence** to a charge of infringement, but the court has a discretion in the award of remedies against an innocent infringer.
2. **S121** – Request for revocation of the patent on the grounds of prior art or some other means.
3. **S128** – Page 406

Unjustifiable threats

* 1. As patent litigation is expensive, sometimes many patent holders threaten to sue for infringement. This section places some control on the court to determine whether the threats are valid and if not, can authorise an injunction against the patent holder and award damages to the applicant.