

Intellectual Property for Horticulture: An Overview



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Contents

1	Introduction	1
1.1	What is Intellectual Property?	1
1.2	Why have Intellectual Property Rights?	1
1.3	Nature of Intellectual Property Rights	1
1.4	Protection of Creators	2
1.5	Registration and Creation	2
2	Plant Breeder's Rights	4
2.1	Introduction	4
2.2	Criteria for Registration	4
2.3	Scope of PBR	8
2.4	Exceptions and Limitations to Protection	12
2.5	Application Process	14
2.6	Duration of PBR	16
3	Patents	17
3.1	Introduction	17
3.2	Patentable Inventions	17
3.3	The Patent Specification	22
3.4	The application process	23
3.5	Duration	25
3.6	Ownership of Patent Rights	26
3.7	Commercialisation and exploitation	27
4	Innovation Patents	28
5	Copyright	30
5.1	Introduction	30
5.2	Meaning of 'Literary Work' under Australian Law	30
5.3	Works must be Original in Order to be Protected	31
5.4	Subsistence of Copyright and Infringement	31
5.5	Acquiring Copyright	31
5.6	Ownership of Copyright	32
5.7	The Economic Rights of the Copyright Owner	32
5.8	Infringement	32
5.9	Defences to Infringement	33
5.10	Duration	33
5.11	Copyright Ownership and Exploitation	33

5.12	Moral Rights	34
6	Trade Marks and Related Rights	35
6.1	Introduction	35
6.2	Registered and Unregistered Marks	35
6.3	Criteria for Registration.....	35
6.4	Registration Process	36
6.5	Duration and Loss of Registration	37
6.6	Ownership of Trade Marks	37
6.7	Certification Trade Marks	38
6.8	Geographical Indications of Origin	39
6.9	Internet Domain Names.....	40
7	Confidential information	41
7.1	Information as 'Property'	41
7.2	The relationship between breach of confidence and Intellectual Property rights....	41
7.3	Elements of the Action for Breach of Confidence	42
7.4	Protectable Information	42
7.5	Obligations of Confidence	42
7.6	'Ownership' of Confidential Information	43
7.7	Breach	44

1 Introduction

1.1 What is Intellectual Property?

Intellectual property is a generic term for various legal regimes, including patents, plant breeder's rights, trade marks, design, copyright and confidential information.

Intellectual property rights protect certain kinds of creativity and innovation by allowing a person to own the creativity and innovation, to control its use (for a limited time) and to be rewarded for its use. These rights are a type of property and can be bought or sold.

A distinction needs to be made between the Intellectual Property rights and the physical object in which they are found. For instance, a new plant variety may contain a number of intellectual property rights – a patent over a particular gene, plant breeder's rights over the variety itself and/or a trade mark over the name of the plant.

For horticulture industries the most important areas of intellectual property rights are plant breeder's rights, patents, trade marks and copyright. These have been dealt with in more detail than the other forms of rights.

1.2 Why have Intellectual Property Rights?

Intellectual property rights are justified on the grounds that they give creators and innovators an opportunity to make a return on their investment and provide incentive for creative or innovative activities. However, there is debate about the scope of intellectual property protection with particular concerns about the tension between:

- the need to promote and reward innovation and creativity, and
- the need to ensure freedom of expression, the flow of information and access to technology.

1.3 Nature of Intellectual Property Rights

Intellectual property rights do not create rights in physical or tangible objects as such. Rather, intellectual property rights protect the mental labour that is embodied in physical or tangible objects. Therefore, they are commonly referred to as 'intangible' rights. For example, copyright does not protect the ideas expressed in a research report, only the particular form in which they are expressed. Likewise, although it is common to think of

inventions as physical objects, patents do not grant inventors rights over products as such, only inventive concepts or ideas that are embodied in a physical form.

An important consequence of the intangible nature of intellectual property rights is that it is possible for a number of different intellectual property rights to co-exist in relation to the same physical object. For example, a number of different copyrights may exist in relation to a book, such as copyright in the artwork appearing on the book's cover, copyright in the storyline or plot, and copyright in the typesetting and layout of the book. Likewise, a number of different patents may be granted in relation to a machine, such as patents over particular components of the machine, patents over the machine itself, and patents over improvements in the operation of the machine.

Intellectual property rights are a type of property. This has a number of consequences. Most obviously it means that, for the most part, intellectual property rights can be dealt with in the same way as any other form of property – they can be bought, sold, assigned and mortgaged. In addition, the proprietary nature of intellectual property means that the owners of intellectual property rights have a right to control who uses their property and how their property is used, they do not merely have a right to be paid for use. The rights granted by intellectual property are primarily rights to exclude others from exercising any of the exclusive rights that are conferred upon the owner of the intellectual property.

1.4 Protection of Creators

In addition to the proprietary aspect of intellectual property rights, some types of intellectual property also create protection for the creators of the 'thing' in question. Such protection is particularly important in cases where the property vests in or has been transferred to another person. Copyright law provides the most extensive protection for creators through its system of 'moral rights'. Such rights include a right to be identified as the author of a work and the right to object to the work being subject to a derogatory treatment.

1.5 Registration and Creation

One key distinction that is normally drawn between different types of intellectual property rights is between those rights that come into existence automatically when the subject matter is created (as, for example, is the case with copyright), and those rights that only come into existence when the subject matter is registered. These second type are where the potential owner has gone through an administrative process of registration to obtain intellectual property protection (as, for example, is the case with patents and PBR). However, not all

types of intellectual property rights can be neatly divided in this way. In particular, while there is a system for the registration of trade marks and while registration offers the trade mark owner a number of advantages, trade signs may be protected even in the absence of registration.

2 Plant Breeder's Rights

2.1 Introduction

Plant Breeder's Rights (PBR) is a special regime of intellectual property for the protection of new plant varieties. In Australia, the protection of new plant varieties is regulated by the *Plant Breeder's Rights Act 1994* (Cth), which is administered by IP Australia. The Act implements the 1991 version of the *International Convention on the Protection of New Plant Varieties* (the 'UPOV Convention') and in some instances implements higher standards of protection for plant breeders than required by the 1991 text of UPOV.

PBR is dependent upon registration and a plant variety may be registered under the PBR Act if it is distinct, uniform and stable. In addition, the variety cannot have been recently exploited. The registered owner of PBR has the exclusive right, in relation to propagating material of the registered variety, to produce or reproduce the material, offer for sale, sell the material, and import/export the material. There are a number of exemptions built into the legislation which includes farm saved seed. PBR lasts for 25 years in the case of trees and vines and 20 years in the case of all other varieties.

PBR was introduced into Australia in 1987 and it is increasingly common for horticulture varieties in Australia to be protected by PBR. For example, in February 2008 there were 36 apple varieties, 115 *Prunus* varieties (peaches, plums, nectarines, cherries), 19 *Citrus* varieties, 57 potato varieties and 48 *Alstroemeria* varieties protected by PBR in Australia.

PBR was introduced to help promote breeding of new varieties for Australian growers and also to give Australian growers access to varieties from other countries which have based their PBR scheme on the UPOV Convention. There are about 70 member countries and some breeders will not allow their varieties to be used in countries unless PBR protection is available

2.2 Criteria for Registration

A plant variety is capable of registration under the *Plant Breeder's Rights Act 1994* (Cth) if the variety:

- has a 'breeder';
- is 'new';

- is 'distinct';
- is 'uniform'; and
- is 'stable'.

2.2.1 'Breeder'

In order to be capable of protection, a variety must have a 'breeder'. The *Plant Breeder's Rights Act 1994* (Cth) provides little guidance as to what is meant by the term 'breeder', but states that breeding includes 'the discovery of a plant together with its use in selective propagation so as to enable the development of a new plant variety'. Neither 'discovery' nor 'selective propagation' is defined. The limited definition of 'breeding' in the *Plant Breeder's Rights Act 1994* (Cth) has stimulated considerable debate as to what activities qualify as plant breeding. As a result, the Plant Breeder's Rights Office convened a panel of experts in 2002 to clarify the eligible plant breeding methodologies that conform with the *Plant Breeder's Rights Act 1994* (Cth) and internationally accepted practice in accordance with the UPOV Convention.

In their report, the Expert Panel on Breeding expressed the view that, for the purposes of the *Plant Breeder's Rights Act 1994* (Cth), eligible breeding methodologies include the same three fundamental steps:

- 1 Amassing, or locating, plant material with sufficient variation ('source population') to enable genetic variation to be identified. This variation could be 'natural' variation (ie created without human interference, such as spontaneous mutation), or could be 'man-made' variation (eg through genetic transformation, cross-pollination, induced mutations, etc);
- 2 Selection of a particular plant, or group of plants, having a set of 'desirable' characteristics from *within* the source population; and
- 3 Propagation of the particular plant form (in preference to other plant forms in the source population), resulting in a change in the expression of one or more characteristics between the source population and the new variety. For a registrable new variety to be produced, this propagation would have to result in a variety that also met the criteria of distinctness, uniformity and stability, and of non-exploitation. (Varieties such as hybrids, synthetics etc may not need to include this step.)

The Expert Panel acknowledged that breeding methodologies continue to evolve and, therefore, it would be inappropriate to limit eligibility for PBR to varieties developed by the application of existing breeding methods. However, the Panel specifically noted that the finding or importation of a variety, by itself, does not meet the above criteria of breeding. The Expert Panel also noted that the *Plant Breeder's Rights Act 1994* (Cth) does not discriminate between varieties and, therefore, all varieties are assessed against the same criteria, regardless of the method of their origination.

2.2.2 'New'

A plant variety is 'new' if it has not been sold or disposed of within Australia with the breeder's consent more than one year before the date on which an application for protection of the variety was lodged with IP Australia. A plant variety will also lack novelty where it has been sold or disposed of outside Australia more than four years before the application date or, in the case of trees and vines, more than six years before the application date.

2.2.3 'Distinct'

A variety is 'distinct' if it is clearly distinguishable, by one or more characteristics, from any other variety whose existence is a matter of common knowledge at the time of the application. In practice, distinctiveness is measured against the most similar variety or varieties of common knowledge. The Act deems that a plant variety will be a matter of common knowledge if an application for protection of the variety has been lodged in a country that is a member of the UPOV Convention, provided that the application leads to the grant of a PBR or to the entering of the variety in the official register of varieties. A variety may also be regarded as a matter of common knowledge where propagating or harvested material of the variety has been commercialised before the priority date of the application for protection of the variety, or has been deposited in a publicly accessible plant collection. The applicant must provide a clear description of the differences between the variety for which protection is sought and the characteristics of other similar varieties.

There is no simple statement that covers all situations of when a variety is sufficiently distinct to justify protection. As a general rule of thumb a registrable variety has to be clearly distinct from all varieties of common knowledge by the expression of at least one characteristic that is genetically determined. In practice, the distinctiveness of varieties is considered on a case-by-case basis.

As of 1 July 2005 variety descriptions will only be accepted using IP Australia's Interactive Variety Description System (IVDS)¹.

2.2.4 'Uniform'

A variety is uniform if, subject to the variation that may be expected from the particular features of its propagation, a population of the variety is sufficiently consistent in those characteristics which make it distinct. UPOV has developed technical guidelines for a number of different plant species that stipulate the degree of permissible variation within which a new variety of that species will be considered uniform. These guidelines can be accessed online at: http://www.upov.org/en/publications/tg-rom/tg_index.htm. Where no technical guidelines have been developed for the variety in question, the PBR Office stipulates that the maximum number of off-types in vegetatively propagated or fully self-pollinated varieties must not exceed:

Number of Plants or Plant Parts Measured	Maximum Number of Off-Types
5	0
6-35	1
36-82	2
83-137	3

For partially self-pollinated varieties the allowable number of off-types is doubled. In cross-pollinated varieties, uniformity is assessed according to a comparison of variances. Measured characteristics are considered uniform if their variance is less than 1.6 times the average of the variances of the varieties used for comparison. Visually assessed characteristics are considered uniform if the number of off-types is the same as, or less than, the average number found in the comparator varieties.

2.2.5 'Stable'

A variety is stable if it remains true to description after repeated propagation or reproduction. Breeders of varieties propagated from seed need to demonstrate stability by including two

¹ See *Plant Varieties Journal*, Volume 18, No.1, page 17 for more details and www.ipaustralia.gov.au/pbr.

generations in the comparative trial. If necessary, stability can be demonstrated in a separate trial. If the variety is to be vegetatively propagated and is uniform, a demonstration of stability is usually not required. It is the applicant's responsibility to ensure that the variety remains true to the description.

2.2.6 Role of 'Qualified Persons'

Australia's plant breeder's rights scheme relies on breeder testing to establish the distinctness, uniformity and stability of new varieties. Using international guidelines developed by UPOV, the applicant (or breeder) or the applicant's agent carry out comparative trials to establish that each new variety satisfies the 'DUS' criteria. To ensure technical rigour, the Plant Breeder's Rights Office requires all applicants to engage the services of an accredited 'qualified person'. The qualified person (or 'QP') acts as the applicant's technical consultant and is responsible for all aspects of the comparative growing trial including the selection of comparator varieties for inclusion in the trial, experimental design, data collection, statistical analysis and preparation of a detailed description of the variety.

A comparative trial in Australia may not always be necessary provided that the variety has been test grown in a UPOV member country using official UPOV guidelines and test procedures, and all the most similar varieties of common knowledge have been included in the trial. If the test indicates the variety is clearly distinct from known Australian varieties, a comparative test may not be warranted. In both these cases, however, the Plant Breeders Rights Office still requires applicants to submit a description and photograph for publication in the *Plant Varieties Journal*.

Only one comparative trial is required in respect of each application. However, as part of the examination of an application, the Plant Breeder's Rights Office may conduct a field examination of the comparative growing trial.

2.3 Scope of PBR

The registered owner of PBR has the exclusive right, in relation to propagating material of the registered variety, to:

- produce or reproduce the material;
- condition the material for the purpose of propagation (conditioning includes cleaning, coating, sorting, packaging and grading);

- offer the material for sale;
- sell the material;
- import the material;
- export the material; and
- stock the material for any of the above purposes.

Plant breeder's rights are personal property and capable of assignment or transmission.

2.3.1 Harvested Material and Products Derived from Harvested Material

In certain circumstances the exclusive rights of an owner of a protected variety extend beyond the propagating material of the variety to material harvested from propagating material of the variety and products obtained from the harvested material. The scope of the PBR owner's rights will extend beyond the propagating material of the protected variety to material harvested from the variety where the following three circumstances are present:

- 1 Propagating material of a plant variety covered by PBR is produced or reproduced without the authorisation of the PBR owner;
- 2 The PBR owner does not have a reasonable opportunity to exercise his or her exclusive rights in relation to the propagating material; and
- 3 Material is harvested from the propagating material.

In this situation, the harvested material will be treated as if it were propagating material. 'Harvested material' includes entire plants, parts of plants and plant material such as cut flower blooms. To illustrate the way in which this provision operates, consider the following situation:

'Grower A' takes a cutting from a protected variety on his neighbour's land and grows and harvests a crop from that cutting. In this situation, the PBR owner will be unaware that 'Grower A' has reproduced propagating material of the protected variety and, therefore, will not have had a reasonable opportunity to exercise its exclusive rights in relation to the propagating material. 'Grower A' will then infringe the PBR in the variety if, for instance, he sells the harvested material without the PBR owner's permission.

Similarly, the PBR owner's rights will extend to products obtained from harvested material where the PBR owner does not have reasonable opportunity to exercise its exclusive rights

in relation to both the propagating material and material harvested from the propagating material.

2.3.2 Essentially Derived Varieties and Dependent Varieties

In some situations the scope of protection given to the owner of a protected variety extends beyond the registered variety to other varieties that are 'dependent' on the protected variety or 'essentially derived' from the protected variety. Dependent plant varieties are varieties that:

- are not clearly distinguishable from the protected variety, but are distinguishable from all other varieties of common knowledge; or
- cannot be reproduced except by repeated use of the protected variety or the non-clearly distinguishable variety (for example, hybrids).
- A plant variety is taken to be an essentially derived variety of another plant variety if:
 - it is predominantly derived from that other plant variety;
 - it retains the essential characteristics that result from the genotype or combination of genotypes of that other variety; and
 - it does not exhibit any important (as distinct from cosmetic) features that differentiate it from the other variety.

The concept of essential derivation represents an attempted compromise between the principle of the freedom to operate (discussed in section 4) and achieving adequate protection for breeders of new varieties. Whilst some degree of uncertainty surrounds the precise scope of the concept of essential derivation, the Expert Panel on Plant Breeding takes the view that it is directed towards protection against 'copycat' activity, not against incremental breeding and the innovation that springs from that endeavour. Genetic modification, whether done by 'traditional' or 'biotech' methods, is not necessarily 'copying'.

The breeder of an essentially derived or dependent variety is not prevented from obtaining PBR protection for that variety. In the case of an essentially derived variety, the owner of the protected variety from which the new variety is essentially derived may apply to the Plant Breeder's Rights Office for a declaration of essential derivation. If a declaration of essential derivation is made, the breeder of the essentially derived variety cannot commercially exploit the variety without the permission of the owner of the variety from which it is essentially

derived. At the time of writing no applications for declarations of essential derivation have been made.

The Plant Breeder's Rights Office envisages that any dispute regarding essential derivation will be resolved by negotiation between the researcher and the owner of the protected variety and, as such, few applications for declarations of essential derivation are expected to be made. The International Seed Federation is presently developing norms based on molecular marking techniques for a number of crops which can be used as guidelines for determining when a variety can be regarded as essentially derived. At present, guidelines have only been developed for Perennial Ryegrass and Lettuce. For more information, see http://www.worldseed.org/Arbitration_EDV.htm.

2.3.3 Naming a New Plant Variety

In addition to these exclusive rights, the *Plant Breeder's Rights Act 1994* (Cth) also provides protection for both the name and synonym of the protected plant variety. A synonym is an additional name which the applicant may also use to commercialise the variety in Australia. The Act imposes a number of limitations on plant variety names. In particular, the name must be a word or words (whether invented or not), to which may be added one or more letters or figures. Further, the name must not be:

- Likely to deceive or cause confusion (including confusion with the name of another plant variety of the same plant class);
- Contrary to law (for example by being a prohibited term under Australian legislation);
- Scandalous or offensive;
- A trade mark that is registered, or whose registration is being sought, under the *Trade Marks Act 1995* in respect of live plants, plant cells and/or plant tissues.
- The name of a natural person either living at the time of the application or who died within 10 years of the application (unless the person or their legal representative has given written consent); or
- The name of a corporation or other organisation (unless the corporation or other organisation has given its written consent).

In addition, the name must comply with the International Code of Nomenclature for Cultivated Plants.

The Plant Breeder's Rights Office has developed some simple guidelines to assist in the naming of new varieties to ensure compliance with the Code:

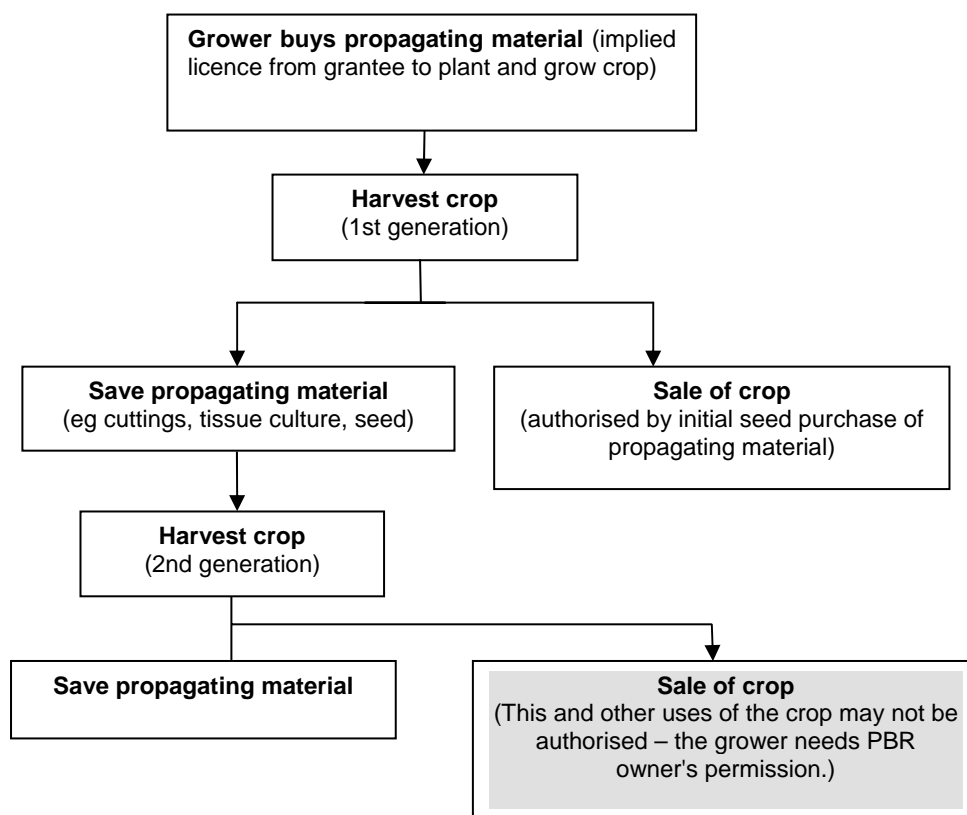
- The name should not contain more than 10 syllables and be no more than 30 characters long (excluding spaces and single quotation marks);
- The name should not exaggerate the merits of the variety (eg 'Freshest of All', 'Best Ever'), nor should the name be made up of simple descriptive words (eg 'Green', 'Giant');
- The name should not use certain words which are banned under the Code and must not be used – these are: 'cross', 'hybrid', 'grex', 'group', 'form', 'maintenance', 'mutant', 'seedling', 'selection', 'sport', 'strain', 'variety' (whether in singular or plural form), 'improved' or 'transformed';
- The only punctuation marks that should be used in the name are apostrophes, commas, single exclamation marks, hyphens or full stops; and
- If the name is a single word, it should not be the same as a genus, whether in botanical Latin or modern language. However, such a word may be used in a longer name as long as it does not form the final word of the name. Further, the name should contain neither the botanical or common name of its genus nor the common name of any species in that genus.

Finally, if an application for PBR has previously been filed in a UPOV member country overseas, the name used in the first filing must be the official registered name in Australia. This ensures that the variety is known by the same name worldwide. The variety may be marketed under a different name in Australia, although the official name should be included in the synonym.

2.4 Exceptions and Limitations to Protection

The *Plant Breeder's Rights Act 1994* (Cth) contains a number of defences to the infringement of a PBR owner's exclusive rights. First, a person who generates a crop from legitimately obtained (ie purchased) propagating material of a protected variety ('first generation crop') is permitted to save further propagating material harvested from the first generation crop and use this propagating material to generate second and subsequent generation crops without infringing the PBR in that variety. This is known as the 'farm-saved seed' exception, although the exception applies to all types of propagating material.

There are a number of important limitations to the scope of the farm-saved seed exception. In particular, the Federal Court of Australia has held that the exception is strictly limited to further conditioning and reproduction of propagating material only. If a grower wishes to sell, trade or barter propagating material from second and subsequent generation crops they must first obtain the permission of the PBR owner. Failure to do so may result in infringement of PBR in the variety, as will any sale etc of any material harvested from second and subsequent generation crops. In effect, the grower is entitled only to save and reproduce further propagating material from first generation crops for their own personal use for replanting. The operation of farm-saved propagating material is summarised in the figure produced below:



As with other exceptions to infringement under the *Plant Breeder's Rights Act 1994* (Cth), the PBR owner can restrict a grower's ability to save and reproduce propagating material by contractual terms that are brought to the grower's attention at the time of purchasing the propagating material. *The Plant Breeder's Rights Act 1994* (Cth) also makes provision for certain categories of plants (for example, taxa) to be declared exempt from the operation of the farm-saved seed exemption. At the time of writing, no such declarations had been made.

A second and more wide-ranging exception to infringement of PBR relates to the use of propagating material protected by PBR for the purpose of plant breeding and experimentation. To this end, the *Plant Breeder's Rights Act 1994* (Cth) provides that acts done in relation to a protected variety for:

- private and non-commercial purposes;
- experimental purposes; or
- for the purpose of breeding other varieties,

will not constitute infringement of PBR in a variety. This means that a variety protected by PBR can be used as an initial source of variation in a breeding program without infringing the rights of the owner of the protected variety or varieties.

2.5 Application Process

The application form for Plant Breeder's Rights is available from the Plant Breeder's Rights Office. The form is divided into two discrete parts. Part 1 requires general information about:

- the applicant, agent and/or breeder;
- the variety (including characteristics which make this variety distinct from the most similar varieties of common knowledge and its parents/source material);
- the origin and breeding procedure used to produce the variety; and
- the Genetic Resources Centre where propagating material will be maintained, and where the comparative growing trial (needed to establish distinctness, uniformity and stability) will take place.

Part 1 is lodged with an application fee of \$300 (at the time of writing).

Part 2 of the form is used to present the results of the comparative growing trial, which is used to show the evidence of distinctness, uniformity and stability as required for registration. Part 2 is lodged with the examination fee of between \$800 and \$1,400. If these criteria are satisfied, the evidence of distinctness is published in the *Plant Varieties Journal*. At the time of writing the registration fee is \$300.

From 1 July 2005, the detailed description in Part 2 of the application form must be completed using the on-line Interactive Variety Description System (IVDS). After this date, detailed descriptions will only be accepted in this format. The main purpose of the system is

to harmonise variety descriptions at both national and international level and to make the PBR application process as smooth and efficient as possible. The IVDS allows qualified persons to fill in descriptions on-line by accessing relevant test guidelines and selecting specific characteristics with their various states of expressions from the options provided. The IVDS incorporates all of the approved UPOV test guidelines (and some national equivalents where a UPOV test guideline is not available) into interactive forms with easy to use drop-down menus. Qualified persons can also “build” their own additional/special characteristics if they are not available in the guideline. The IVDS also accepts statistical information. Access to the IVDS is available only to registered qualified persons.

Once an application has been lodged, the Plant Breeder's Rights Office undertakes a 'preliminary examination' of the application to ensure that no similar applications have already been lodged and the plant variety is on the face of the application distinct from all other varieties that are a matter of common knowledge. If the application meets these criteria, it will be given 'provisional protection' which protects the variety against infringement during the period between the date on which the application for PBR was made and the date on which PBR is eventually granted. Once provisional protection has been obtained, the applicant can commercialise the variety without compromising their application. However, the applicant can only sue for infringement during the period of provisional protection once PBR has been granted.

Provisional protection will be lost unless the applicant files a detailed description (Part 2 of the application) of the variety within 12 months of the application being accepted. The detailed description is published in the next issue of the *Plant Varieties Journal* (which is published online four times a year at http://www.ipaustralia.gov.au/pbr/journal_download.shtml). The detailed description is a comprehensive description of the characteristics of the variety, including those characteristics that distinguish the variety from other varieties, the existence of which is a matter of common knowledge, and particulars of any test growing that has been conducted in order to establish that the variety is distinct, uniform and stable.

Within six months of the date of publication of the detailed description in the *Plant Varieties Journal*, third parties whose commercial interests would be affected by the grant of PBR for the variety may file a written objection to the grant with the Plant Breeder's Rights Office. The written objection must provide particulars of the manner in which the person considers his or her commercial interests would be affected by the grant, and the reasons why the person considers that the application does not satisfy the criteria for protection.

If no objections are received or the objections are unsuccessful, the PBR Office will then examine the application. If the application meets the necessary criteria, PBR protection will be granted for the variety.

2.6 Duration of PBR

PBR protection commences on the day that the grant of the PBR is made, although as noted above, PBR owners can sue for retrospective acts of infringement of the PBR during the period of provisional protection. The rights last for 25 years in the case of trees and vines, and 20 years in the case of all other varieties.

3 Patents

3.1 Introduction

A patent is a form of personal property granted under the *Patents Act 1990* (Cth) that confers exclusive rights to 'exploit' an invention upon the person to whom the patent is granted (known as the 'patentee'). Generally speaking, the rights conferred upon someone who invents a product are greater in scope than those granted to a person who invents a method or process. Where the invention is a product, this allows the patentee to (or offer to) make, hire, sell, or otherwise dispose of the product, use or import it, or keep it for the purpose of doing any of those things. Where the invention is a method or process, the patentee can use the method or process or do any act mentioned above in respect of a product resulting from such use.

Patent protection is dependent upon registration. It is important to register prior to disclosing the invention to the public. After disclosure, it is, generally speaking, impossible to obtain patent protection.

3.2 Patentable Inventions

A 'patentable invention' is an invention that:

- is a 'manner of manufacture';
- is novel;
- involves the taking of an inventive step;
- is useful; and
- has not been secretly used by the applicant within Australia before the priority date of the patent application.

3.2.1 'Manner of Manufacture'

To be capable of patent protection an invention must be a 'manner of manufacture'. The words 'manner of manufacture' appear in the English *Statute of Monopolies*, which was enacted in 1623. Although the meaning of the phrase is obscure, the Australian High Court has held that an invention is a 'manner of manufacture' if it can be characterised as an 'artificially created state of affairs' that is practically useful in a field of economic endeavour.

As such, the scope of subject matter that falls within this definition is extremely broad. The only types of subject matter expressly excluded from patentability by the *Patents Act* are human beings and the biological process for their generation. In addition, plants and animals and the biological processes for their generation cannot be protected by an innovation patent

Generally speaking, there has been a gradual expansion over time of what is regarded as patentable subject matter. Despite this expansion in the scope of patentable subject matter, the Australian Patent Office has indicated in a number of recent decisions that there are some restrictions to what can be patented. In particular, the Australian Patent Office has expressed the view that patents are only available in respect of inventions that involve the discovery or application of laws of nature or the application of science or technology. Likewise, the European Patent Office takes the view that European patents are only available where the invention involves a 'technical effect'. In contrast, the United States Patent and Trademark Office recently decided that there is no such limitation under United States patent law.

Another potential fetter on the availability of patents is the requirement that the grant of a patent must not be 'generally inconvenient'. This phrase also derives from the *Statute of Monopolies* and, like the phrase 'manner of manufacture', its meaning is somewhat obscure. Until recently, patents for methods of medical treatment were not available in Australia on this basis, and it has been suggested that socially and morally objectionable inventions might similarly be refused patent protection. In recent years, however, Australian courts have been reluctant to revoke patents on this basis, whilst the Australian Patent Office takes the view that social or moral considerations are not relevant to the question of patentability.

3.2.2 Novelty

To be patentable, an invention must be novel, or disclose something that was not previously known or used. A patent will lack novelty if all the essential features of the invention or information disclosing all of the essential features of the invention have been made publicly available anywhere in the world before the 'priority date' of the patent. The priority date serves as the temporal reference point for determining the validity of a patent, in particular novelty and inventive step. Usually, the priority date of an application will be the date on which a complete application is filed, unless an associated provisional application has been filed earlier, in which case the priority date will be the date of filing of the provisional application. To deprive an alleged invention of novelty, the disclosure must also enable the

invention to be performed or reproduced by a person skilled in the field of technology to which the invention relates.

There are a number of limited exceptions to the operation of the novelty requirement. First, a patent will not lack novelty where the invention has been made publicly available by publication or use of the invention by, or with the consent of, the patentee within 12 months of the filing date of the *complete* application (this is known as the 'grace period'). In contrast, where information about the invention is made publicly available before the priority date without the consent of the patentee (for example, in breach of confidence), the patentee retains the right to file a provisional application, provided this is done within 12 months of the date on which the information was made publicly available. The grace period is an attempt by the patent system to accommodate scientific norms, such as free and prompt dissemination of information about new discoveries and revelations, which were often seen to be in conflict with the novelty requirement (which demands that information about the invention be suppressed until a patent has been applied for). However, its effectiveness is limited by a number of factors. First, the patent systems of a number of important markets (most notably Europe) do not contain grace periods. This means that patent protection will be unavailable in certain countries where the patentee has disclosed the invention before filing for protection in those countries. Secondly, the grace period is only available in respect of information about an invention that is made publicly available by, or with the consent of, the patentee after 1 April 2002.

A second exception to the operation of the novelty requirement that is of particular importance to the horticultural industry relates to the situation where it is necessary to work the invention in public before applying for a patent (eg in field trials). In that situation, use of the invention in public will not deprive the patent of novelty provided that:

- the use of the invention was genuinely experimental and was conducted in an open area for the purpose of determining the utility of the invention;
- the performance of the experiment involved unavoidable disclosure of the invention;
- any profit or advantage derived from the experiment was accidental; and
- a patent application is made within 12 months of the first public working of the invention.

3.2.3 Inventive step

To be patentable, an invention must involve an inventive step. An invention will lack an inventive step if the invention claimed would be obvious to a person of ordinary skill in a

relevant field of technology. Obviousness is assessed against the common general knowledge available to persons working in the relevant field of technology, and information which a skilled person could be reasonably expected to have ascertained, understood, and regarded as relevant to work in the field in Australia. As such, the threshold of obviousness in Australia is potentially lower than most other jurisdictions, where inventive step is assessed against the common general knowledge of a skilled worker located anywhere in the world. 'Obviousness' has been described in various ways and is notoriously difficult to anticipate. A test commonly employed is: 'would the notional research group at the relevant date, in all the circumstances, which include a knowledge of all the relevant prior art, directly be led as a matter of course to try one avenue of inquiry in the expectation that it might well produce a useful result or alternative?' Further, factors such as whether the invention fulfils a 'long-felt want', overcomes difficulties or problems which others have tried unsuccessfully to overcome, the willingness of rivals to imitate, contrary indications in the prior art, and the commercial success of the invention will be regarded as relevant to determining whether or not an invention is obvious.

3.2.4 Usefulness

To be patentable, an invention must be useful (sometimes referred to as 'utility' or 'industrial applicability'). The utility requirement in Australia operates at a very low standard. An invention will be useful under Australian patent law if by following the directions in the specification something useful within each claim can be made. The concept of utility in patent law does not mean that an invention must be socially useful in the sense of fulfilling some desirable function, but simply that the invention should attain the result that the inventor has promised. Further, an invention does not lack utility merely because the invention lacks perfection or performs crudely. Commercial success is not required, nor is it essential that the invention accomplish all of its intended functions, or operate under all conditions – partial success is sufficient to demonstrate utility.

In contrast to the Australian position, patent offices in other major markets – in particular, the United States, Europe and Japan – have in recent years introduced more exacting standards of utility. In 2001 the United States Patent and Trademark Office introduced new Utility Examination Guidelines. These Guidelines require all patentable inventions to have a 'specific, substantial and credible' utility. In essence, an invention will possess patentable utility under these guidelines where the invention is capable of fulfilling a useful purpose in currently available form. The purposes for which the invention is claimed to be useful must

be specifically described and must be capable of being put to this purpose without further research and experimentation.

The United States Court of Appeals for the Federal Circuit recently endorsed these guidelines as being consistent with US patent law. The European Patent Office has also endorsed the use of these guidelines in the examination of the European patent applications, as have both the Australian Law Reform Commission (ALRC) and the Intellectual Property and Competition Review Committee (IPCRC) in Australia. However, the Federal Government is yet to respond to the recommendations made by the ARLC and the IPCRC.

3.2.5 Secret Use

A patent will be invalid where the applicant has secretly used the invention within Australia before the priority date of the application. The prohibition on secret use is designed to prevent patentees from obtaining a *de facto* extension of the term of the patent by working the invention in secret (for example, marketing a product that is incapable of being reverse-engineered) and then applying for patent protection when the secret is likely to be discovered by another. A patentee will usually be found to have secretly used their invention where they have derived commercial benefit from the invention before the priority date. For example, accepting an offer to sell a patented product before the priority date will amount to secret use of the invention, even where the transaction is not completed until after the priority date.

To avoid depriving patentees of their rights on the basis of appropriate uses of the invention during the developmental stage prior to the filing of an application, the *Patents Act* lists certain uses which will not preclude patenting:

- use for the purpose of a reasonable trial or experiment only;
- use occurring solely in the course of a confidential disclosure of the invention;
- any other use of the invention for a purpose other than trade or commerce; and
- use by the Commonwealth, a State or Territory where the patentee has disclosed the invention to the Crown.

3.3 The Patent Specification

The patent specification is the kernel of patent law. Patent specifications are highly complex documents which consist of two distinct parts: the body and the claims. The function of the body of the specification is to provide a full description of the invention and to instruct persons skilled in the relevant field of technology to which the invention relates, (rather than the public at large), in how to make and use the invention. In contrast, the function of the claims is to define the invention in clear and precise terms so that others may know the exact boundaries within which they will be trespassers. In this sense, patent claims are analogous to fence posts which mark the boundaries of real property.

The practice of drafting patent specifications is a delicate and complex task that should be undertaken by registered patent attorneys who have been trained in the practice of patent drafting and who hold tertiary qualifications (usually at the postgraduate level) in a relevant field of science or technology. One of the reasons why patent drafting is so complex is because a key principle of patent drafting is to attempt to capture with the wording of the claim(s) as many different applications of the principle which lies behind the invention as possible. As such, patent claims are often expressed in general, abstract language based upon specific examples described in the body of the specification. For example, a screw or nail might be referred to in a claim as 'fastening means', or a door handle or lever as 'actuating means'.

However, patent attorneys need to be cautious not to claim too broadly. Where a claim is drafted in terms more extensive than the description contained in the body of the specification it runs the risk of being held invalid for lack of 'fair basis'. For this reason, it is common practice for patent specifications to include multiple claims relating to different aspects of the invention. Patent claims are commonly drafted in hierarchical fashion, starting with the broadest claim and descending into various levels of particularity with each successive claim. These claims may be appended to preceding claims (known as 'dependent' or 'subsidiary' claims) or be independent from them. The logic behind this mode of drafting is to ensure that the patentee receives some form of protection in the event that the broader claims are struck out on one or more grounds of invalidity. The validity of one claim is not affected by the validity of any other claim (unless they are dependent of another claim).

3.4 The application process

3.4.1 Applicants

A patent can be granted to an inventor or a person to whom the patent has been assigned or who is entitled to have a patent assigned to them, typically an employer. However, in all cases the inventor has the right to be named in the application as such.

3.4.2 Application

The Australian patent system operates on a first-to-file basis (as opposed to the United States, which grants patents to the first to invent). An applicant may file either a provisional application or a complete application. In practice, provisional applications are favoured because the *Patents Act* imposes less stringent requirements for these sorts of applications. A complete application must be accompanied by a complete specification which fully describes the invention, including the best method of performing the invention (so that others can reproduce it from the information given), and end with claims defining the invention (or the monopoly which is sought). In contrast, a provisional application need only be accompanied by a provisional specification which sets out a general description of the invention. The provisional filing system therefore enables the applicant to obtain an early priority date. Generally speaking, any disclosure or commercialisation of the invention after the priority date will not compromise the validity of the patent, provided that the applicant files a complete application with IP Australia within 12 months of the filing date of the provisional specification.

To prevent abuses of the provisional filing system, the *Patents Act* provides that a complete application is not entitled to rely on an earlier priority date established by the filing of a provisional application unless the invention claimed in the complete specification is 'fairly based' upon matter disclosed in the provisional specification. In general, a claim will be fairly based on matter disclosed in a provisional specification if the invention claimed is a development along the same line of thought which underlies the invention described in the provisional specification. However, if a claim includes additional features about which the provisional specification is silent that involve the taking of an inventive step or a departure from the line of thought disclosed in the provisional specification, then it will lack fair basis. As such, the fair basis requirement acts as a gate-keeper to prevent applicants from abusing the provisional filing system by filing for patent protection at too early a stage in the development of the invention before the inventive concept has crystallised in the mind of the

inventor (in US patent law this is referred to as the formation of a 'permanent and definite idea').

A finding of lack of fair basis in relation to a provisional specification (as opposed to a claim of a complete specification) does not automatically result in the claim being invalid – it simply means that the claim is not entitled to the priority date obtained by the filing of the provisional specification. Further, the validity of any other independent claims which are fairly based upon matter disclosed in the provisional specification will not be adversely affected by a finding of lack of fair basis in relation to any other claim. However, the validity of claims lacking fair basis may be compromised where the inventor has disclosed the invention after filing for provisional protection (because the applicant is no longer entitled to the provisional filing date), or because a competitor has filed an application for a patent relating to the same invention in the intervening period.

At the time of writing, the application fee for a complete application is \$320 (\$290 if filed electronically); the filing fee for a provisional application is \$80. Depending on the type of invention made and the extent of objections raised by the Patent Office, the overall cost on prosecuting a patent application in the Australian Patent Office ranges from around \$5,000 to up to \$20,000. The cost of obtaining patent protection in all important markets can therefore reach into the hundreds of thousands of dollars. Much of this cost is related to the complexity of writing the claim and specification, and the need to have professional help from a Patent Attorney.

3.4.3 Publication

Approximately 18 months after the priority date of an application the complete specification is published in the *Australian Official Journal of Patents*. This informs the public about the details of the invention, and places it on notice that protection has been applied for. Liability for patent infringement accrues from the date of publication (this is why goods often bear the mark 'patent pending'), however, proceedings cannot be commenced until the patent has been granted.

3.4.4 Examination and Grant

The Australian patent system is based upon the principle of 'deferred examination'. This means that the Australian Patent Office does not examine patent applications unless and until requested by the applicant. Examination of the application can be requested at any

stage, but must be requested no later than 5 years from the date of filing of the complete application otherwise the application will lapse. In practice, the Patent Office will direct the applicant to lodge a request for examination within 1 to 2 years of the date of filing of the complete application. If the applicant does not comply with this demand within 6 months of the date of its issue, the application will also lapse. The Patent Office examines the application to ensure that the invention relates to a manner of manufacture, is novel, involves the taking of an inventive step, and complies with the requirements in relation to specifications and claims (section 40). The Patent Office's examination of novelty and inventive step is limited to documentary evidence – it does not consider allegations of undocumented prior use, nor does it consider whether the invention is useful or has been secretly used (although these issues may be raised in opposition and revocation proceedings).

Often, applicants delay requesting examination, for example, in order to assess the progress of commercialisation of the invention or the value of continuing with the patent process. The request for examination fee is \$340. If there are problems with the application, such as that the claims are too broad, then the patent examiner will notify the applicant. If the application is accepted, a Notice of Acceptance is published in the *Australian Official Journal of Patents*. Within 3 months of the date of publication of the Notice of Acceptance any person may oppose the grant of the patent by filing a notice of opposition with IP Australia. The grounds of opposition available to opponents are wider than those available during examination by the Patent Office, in particular, opponents can raise allegations that the patent is invalid because of prior use or secret use by the patentee, and because the invention is not useful. In practice, opposition proceedings are frequently concerned with disputes over entitlement to the patent (ie who is the 'inventor'). Once this period expires, opposition proceedings may no longer be brought, but the validity of the patent may still be challenged in later proceedings (in particular, it is common for defendants to challenge the validity of the patent in infringement proceedings). If no oppositions to the patent are lodged or any oppositions are unsuccessful, the Patent Office must grant a patent for the invention.

3.5 Duration

In Australia, a standard patent lasts for up to 20 years or, in the case of innovation patents, up to 8 years. There is special provision for the term of patents for pharmaceutical substances to be increased up to 25 years. Maintenance fees become payable from the 5th anniversary of the patent (or the 2nd anniversary in the case of innovation patents). For standard patents, maintenance fees commence at \$180 and increase to \$1000 by the 19th

anniversary. The average life of a patent is approximately 12 years (ie people choose not to maintain them for the full 20 years in many cases).

The grant of a patent is no guarantee of its validity. Despite the grant of a patent, a court may at the request of any person, revoke the patent for invalidity. Proceedings for revocation of a patent are usually commenced by way of cross-claim to infringement proceedings. The grounds on which a patent can be revoked are essentially the same as those on which the grant of a patent may be opposed, with the exception that a patent can be revoked on the additional ground that the patent was obtained by fraud, false suggestion or misrepresentation.

3.6 Ownership of Patent Rights

Patents are registered in the name of their owners (often described as the 'patentee,' 'patent holder' or, where ownership of the patent has been assigned, 'assignee'). The law's starting point is that it is the inventor who will be entitled to first ownership of the patent. Inventors can therefore apply for a patent and if their application is successful they will be the patent owner. However, where an invention is made by an employee in the course of his or her duties the rule is that the invention becomes the property of the employer, unless there is an explicit agreement to the effect that the employee is to retain ownership. Even in the absence of an employment relationship an inventor may have assigned his or her rights to an invention prior to its creation or may have assigned his or her rights thereafter (for example, to a start up company or large commercial enterprise). In practice it is rare for individual inventors to be the patent owner.

It is also common practice for the basic rules relating to employee inventions to be reinforced and supplemented by specific terms in the employment contract that provide that the employer is to own inventions created in the course of employment. Difficulties arise where there is doubt as to whether the work was created in the course of employment or where there are overlapping employment relationships.

It should also be noted that over and above questions relating to ownership, patent laws generally provide inventors with the right to be named as such on the patent specification. A number of countries (not including Australia) also provide employees with an entitlement to specific rewards in recognition of the economic benefits of an invention.

3.7 Commercialisation and Exploitation

The exclusive rights of the patentee are personal property which can be sold, assigned, licensed, mortgaged or bequeathed by will. To be effective, an assignment of a patent must be in writing, signed by, or on behalf of, the patent owner and the assignee, and registered with IP Australia. A patent can be assigned on a geographical basis with rights assigned for exploitation of the patent in a particular place or region in Australia. Importantly, a co-owner of a patent cannot grant a licence or assign an interest in it without the consent of the other owners, subject to any contrary agreement.

A patent confers a limited temporal monopoly in respect of the patented invention. Once the patent term has expired, the invention becomes part of the public domain and is open to anyone to use, provided that this does not infringe any patent further (eg a patented improvement of the original invention). The owner of the patent granted under the *Patents Act* obtains exclusive rights to exploit the invention or to authorise another person to exploit it throughout Australia for the term of the patent. Where the invention is a product, this allows the patentee to make, hire, sell, or otherwise dispose of the product, offer to make, sell, hire or otherwise dispose of it, use or import it, or keep it for the purpose of doing any of those things. Where the invention is a method or process, the patentee can use the method or process or do any act mentioned above in respect of a product resulting from such use.

Co-owners of a patent are each entitled to exercise the exclusive rights conferred by the patent without having to account to the others.

4 Innovation Patents

Innovation patents were introduced into Australian law in 2001. They are intended to provide intellectual property rights for incremental and lower-level inventions that would not be sufficiently inventive to qualify for standard patent protection. Innovation patents are not required to meet the test for *inventive step*, as with a standard patent. Rather they are required only to meet a lower test of *innovative step*.

The application is in the same form as the complete standard application, but an innovation patent can only contain a maximum of 5 claims. The application fee is \$180 (\$150 for an online application). Innovation patents can be granted without a substantive examination and there is no pre-grant opposition period. However, innovation patents are only enforceable once an *examination* has been requested and paid for, and the patent is certified. Innovation patents are granted for an initial period of 2 years and can remain in force for a maximum of 8 years, with annual maintenance fees payable after the first year.

In November 2004, the Advisory Council on Intellectual Property (ACIP) released its report, *Should plant and animal subject matter be excluded from protection by the innovation patent?*

The report considered whether Australia should provide an intermediate level of patent protection – the innovation patent – for plants and animals and the biological processes for their generation.

Innovation patents were introduced in 2001 in response to demand in Australia for an inexpensive second-tier or intermediate level of patent protection to safeguard small, incremental innovations.

However, plant and animal subject matter and the biological processes for their generation were excluded from the innovation patent system due to concerns expressed by some industry sectors at the time.

The Advisory Council recommended that the current exclusion from the innovation patent of plants and biological processes for their generation should be maintained at this time. It was concerned that there was a need to ensure that there was not a significant overlap with the existing plant breeder's rights regime.

The Advisory Council observed: "The main argument for maintaining the exclusion for plants is that the PBR exceptions for use are critical for the success of the system. Breeders and farmers depend on having some access to protected plant material. Providing a parallel form of lower-level protection without the exceptions embodied in the PBR system would cause major disruption in the industry. Also, the granting of innovation patents without substantive examination is seen as a major cause of uncertainty. The lack of examination contributes to the perception that the innovation patent and the PBR systems overlap in the level of inventiveness and innovation."

The Advisory Council also recommended that the current exclusion from the innovation patent of animals and biological processes for their generation should be maintained at this time. It noted: "The Department of Agriculture, Fisheries and Forestry and the Australian Centre for Intellectual Property in Agriculture argued that allowing innovation patents for animals would be in conflict with animal breeders' established frameworks of ownership of animals and their reproductive capabilities. This would cause great concern amongst a number of industries, such as horse racing, kennel clubs and livestock producers."

The Advisory Council recommended that the higher order standard patents should still remain available for plant and animal subject matter - especially in relation to biotechnological inventions. The (then) Federal Industry Parliamentary Secretary Warren Entsch MP announced the Government has accepted the recommendations of the Advisory Council.

5 Copyright

5.1 Introduction

Copyright protects creations in a range of fields. Subject matter protected under the *Copyright Act 1968* (Cth) includes:

- 'literary works', such as books, computer programs, databases and research reports;
- 'dramatic works', such as plays, movie scripts, and choreographic shows;
- 'musical works', such as the musical score of a song;
- 'artistic works', such as paintings, drawings, sculptures, and photographs;
- sound recordings, or devices on which sounds are embodied, such as compact discs and cassette tapes;
- cinematographic films, or 'moving pictures';
- television and sound broadcasts, such as television and radio programs; and
- published editions of works, such as the typographical layout of newspapers.

It is important to emphasise that although copyright is often referred to as protecting 'artistic' subject matter, the law avoids making assessments of the artistic merits of a work and hence does not require a work to be creative in order to be protected. Consequently, business letters will, for example, be protected as literary works and technical drawings will be protected as artistic works.

5.2 Meaning of 'Literary Work' under Australian Law

The legal category of 'literary works' is not confined to works of literature but extends to cover a wide variety of subject matter. Generally speaking, any work expressed in print or writing (other than a dramatic or a musical work) will be protected as a literary work provided they are 'original' (see below). Research papers will almost certainly attract protection as literary works, even if they are very short. Computer programs and databases (both in print form and electronic form) will also be protected as literary works. Until recently there was some doubt as to whether databases arranged according to very simple criteria (for example, where the information is arranged numerically or alphabetically) would attract

copyright protection. However, it has now been held that such works do attract copyright protection in Australia, although this may not be the case elsewhere.

5.3 Works must be Original in Order to be Protected

The *Copyright Act* provides that a work will only attract protection where the work is 'original'. In Australia, the originality test is set at a very low level. The law does not require that a work be novel or creative in order to attract protection. Rather, 'originality' in this context means primarily that the work be 'not copied' - works which merely reproduce an earlier work will not attract protection. In contrast, where a work has been substantially altered this will attract separate copyright protection (but see Subsistence of Copyright and Infringement, below).

5.4 Subsistence of Copyright and Infringement

One common misunderstanding in relation to copyright concerns the relationship between the subsistence of copyright and infringement. Generally speaking, these issues must be considered in isolation - the mere fact that a work attracts its own copyright protection does not prevent it from being an infringement of an earlier underlying work. This point is perhaps best illustrated by considering the position of translations. One of the exclusive rights of the copyright owner is to control translations of the work. An unauthorised translation will therefore infringe copyright, even though translations also attract independent protection. Similarly, it would be no defence to an action for infringement of copyright in a database to demonstrate that a database is original because it consists largely of new material - if it can be shown that the database in question nevertheless copies a substantial portion of an earlier database it will still amount to an infringement.

5.5 Acquiring Copyright

Unlike registrable forms of intellectual property, copyright protection arises automatically on creation of a work. Copyright therefore subsists in both published and unpublished works and there is no need to register copyright in Australia in order to gain protection. Nor is there a need to place a copyright notice (© Year, Name) on a work. It is often said that steps should be taken in order to prove when a work was created but such steps have no formal legal significance. The only formal requirement for copyright protection is that the work be expressed in a material form, that is, that it be sufficiently 'fixed' in order to allow determination of the content of the work. Modes of fixation include writing, electronic storage and sound recordings. Thus handwritten laboratory notes, notes stored on a computer and

laboratory notes spoken into a Dictaphone would all attract literary copyright (in the latter case there would also be copyright in the sound recording itself).

5.6 Ownership of Copyright

The basic rule as regards ownership of copyright is similar to the rule relating to ownership of patents - the first owner of copyright will be the author, that is, the person who actually creates or makes the copyright work. There are a number of exceptions to this basic rule. For example, where a photograph is commissioned for private and domestic purposes the person commissioning the photograph is given certain rights under the *Copyright Act*. The main exception is virtually identical to that in patent law - where a work is made in the course of employment the first owner will be the employer, subject to any agreement to the contrary. Again, as is the case with patents, even in the absence of an employment relationship an author may have assigned his or her rights to a work and assignments relating to 'future' copyrights will be valid, provided that they identify the subject matter with sufficient precision. Note, however, that without any agreement (contract) to the contrary, a person who commissions the creation of a copyright work does not thereby become the owner of that work. However, the party who commissioned the work will retain the right (an 'implied licence') to use the work for the purposes for which it was commissioned.

5.7 The Economic Rights of the Copyright Owner

Copyright protection confers upon the copyright owner a number of exclusive economic rights. The scope of the rights enjoyed by the copyright owner depends upon the nature of the copyright material, but the most important rights are to:

- reproduce the work in any material form;
- publish the work;
- communicate the work to the public (including web transmission); and
- make an adaptation of the work (including the right of translation).

5.8 Infringement

Someone infringes copyright if they do an act which falls within the exclusive rights of the copyright owner without the owner's permission (express or implied). It is not necessary that the infringing act be done in relation to the whole of the copyright material, rather the *Copyright Act* provides that it is sufficient if the act is done in relation to a 'substantial part' of

the copyright material. The phrase 'substantial part' is not otherwise defined in the Act, and this has therefore been a matter for judicial interpretation. Generally speaking, however, it operates as a low threshold, and has both qualitative and quantitative aspects.

5.9 Defences to Infringement

The Act provides that certain acts that would otherwise amount to an infringement of copyright are privileged and will not infringe the copyright owner's rights. These 'exceptions' or 'users rights' play an important role in protecting the interests of the public. The most important of these exceptions are the four fair dealing provisions which allow copying for the purposes of:

- research or study;
- criticism or review;
- reporting of the news; and
- professional advice given by a legal practitioner or patent attorney.

It is important to note that these rights of fair dealing are limited under Australian law and that great care needs to be taken when relying upon them.

5.10 Duration

In Australia, the length of protection varies according to the nature of the copyright material, and whether or not it has been published. Copyright protection for literary works generally lasts for a period of 70 years from the death of the author. It should be noted that the term of protection is calculated by reference to the author's life, even after the transfer of the copyright to another person and even if the author was not the first owner of copyright (as where the author is an employee and the work is created in the course of employment).

5.11 Copyright Ownership and Exploitation

The basic rule as regards first ownership of literary works is that the author is the first owner of copyright. However, where a work is made by an author 'in pursuance of the terms of his employment by another person under a contract of service or apprenticeship' the work belongs to the employer. Copyright, like other forms of intellectual property, can be assigned or licensed. The Act provides that copyright assignment and licensing can be limited in respect of classes of acts, place, time, or part of Australia.

5.12 Moral Rights

In addition to the economic rights given to the copyright owner, the author of a copyright work (who may or may not also be the copyright owner) enjoys a number of personal or 'moral' rights, including:

- The right of attribution - the right to be identified as the author of a work;
- The right against false attribution - the right to not be falsely identified as the author of a work; and
- The right of integrity - the right to object to derogatory treatment of a copyright work which harms the honour and reputation of the author.

In contrast to the economic rights, moral rights are personal to the author and cannot be assigned, licensed or waived. However, an author may grant consent to particular uses of a copyright work.

6 Trade Marks and Related Rights

6.1 Introduction

Trade marks are a shorthand way of communicating information that purchasers need in order to make informed purchasing choices. It is said that they reduce customers' costs of shopping by informing them that an item is made by the same producer as other similarly marked items that they have liked (or disliked) in the past. The information provided by trade marks is said to be particularly important in relation to so-called "experience goods", that is, goods that a consumer cannot judge merely through inspection.

6.2 Registered and Unregistered Marks

Under Australian law, trade marks may be protected even without being registered when they have been used in the marketplace and enjoy consumer recognition (they are protected through the law of 'passing off'). It might therefore be asked why a trader would take the trouble of registering a mark under the *Trade Marks Act 1995* (Cth) given that this can be a costly and time-consuming process. The answer is that registering a mark confers a number of benefits to the proprietor. In contrast to the law of passing off, which protects unregistered marks, registration enables traders to protect their marks before they are used in the marketplace. Registration is also advantageous in that it confers greater certainty and therefore should reduce the likelihood of disputes. It also makes infringement easier and cheaper to prove as the registration provides prima facie evidence of ownership. From the public and business perspective, having a registration system is desirable because the register acts as an important source of information about what signs are protected and in which commercial spheres a mark is being used.

6.3 Criteria for Registration

In order for a mark to be registrable it must be shown that there are neither 'absolute' nor 'relative' grounds for rejecting the mark.

6.3.1 'Absolute' Grounds of Refusal

These relate to the inherent characteristics of the mark. Reasons for rejecting a mark include that it is misleading (for example, 'Orlwool' for goods made of nylon) or offensive (for example, it was recently indicated in the United Kingdom that French Connection's 'FCUK'

mark might be objectionable on this basis). The most important 'absolute' ground of refusal, however, is that the mark lacks 'distinctiveness'. Distinctiveness in this context concerns whether the average consumer would understand the sign as indicating the trade origin of the goods. It is assumed that marks which apparently refer to the quality of the goods (luxurious, comfortable) or to their geographical origin ('English' marmalade, 'Oregon' for machinery) or to their purpose, value etc will not be viewed by consumers as indicating that they were produced by a particular manufacturer. A secondary, but nevertheless highly important, factor in making the assessment of whether a mark is distinctive is whether other traders would honestly desire to use the mark in question or something closely resembling it.

Even if a mark lacks inherent distinctiveness it may acquire distinctiveness as a result of the way it is used. The key is whether the mark has come to be understood as an indication of the source of the goods. Once a mark has acquired distinctiveness in this sense it will become registrable (for example, 'Oxford' for books is registrable because the average consumer now understands this to mean that the book is published by Oxford University Press and not merely that the book has been printed in the city of Oxford).

6.3.2 'Relative' Grounds of Refusal

These relate to the right of the applicant to apply for the mark, rather than the characteristics of the mark itself. The most important 'relative' ground of refusal is that the mark is identical to or deceptively similar to an earlier trade mark.

In addition, trade marks cannot be the same as the name of a plant variety. The *Plant Breeder's Rights Act 1994* (Cth) specifically excludes the use of a trade mark as a variety name. Similarly IP Australia would not register a PBR protected variety name as it would have the potential to confuse the market place. A trade mark can be used in conjunction with a variety name. For example there is a registered trade mark 'Aussie Royale' that covers plants and trees for ornamental horticulture. If the owner of the trade mark also had PBR over a number of ornamental varieties, they could use the combination 'Aussie Royale' plus [Variety Name].

6.4 Registration Process

Trade marks are registered in relation to specific goods/services. Application is made to IP Australia via an approved form (available at www.ipaustralia.gov.au) which can be submitted in hard copy or electronically. This application can be made by the owner of the mark, by the owner's legal representative, or by a number of parties if the trade mark is used jointly by

each of them. The application must give details of the applicant (name, address and address for correspondence), provide a graphic representation of the trade mark, and specify the goods and/or services in respect of which the mark is to be registered. IP Australia uses a system where all goods and/or services are classified in 45 classes, and the applicant must ensure that the goods and/or services are grouped in their correct class or classes.

There is a fee for registration which is determined by the range of goods and/or services for which the mark is to be registered. For a single class application the fee is \$150 for an application in hard copy and \$120 for an electronic application. There is a further \$300 registration fee payable within six months of acceptance of the application by the Registry.

The application will initially be examined to ensure that it can be registered. If the Registrar decides to reject the application the applicant will be given an opportunity to make a case to have this decision reversed. Third parties will also have an opportunity to object to the registration once it is accepted by the Registrar. In such cases the registrar will hear representations from both parties before deciding whether to accept or reject the mark.

Examples of registered trade marks in the horticulture industries include 'Aussie Royale' (can be used for plants, trees for ornamental horticulture and general horticultural use), 'Plumtastic' (can be used for live plants, flowers, seeds, bulbs, plant propagation materials in this class), and 'Speaking Rose' (can be used for flowers, including cut flowers and flowering plants).

6.5 Duration and Loss of Registration

Registered trade marks have to be renewed every ten years, although there is no limit to the number of times that a mark can be renewed. There are, however, certain ways in which the right to renew may be lost. Most importantly, a registration is liable to be removed from the register if the owner has failed to use the mark in the preceding three years.

6.6 Ownership of Trade Marks

Trade mark law is concerned with protecting information used by consumers to make informed purchasing decisions. Consequently, the justifications for the protection of trade marks are not normally said to lie in the creation of the trade mark as such, and rights over trade marks are afforded in many cases where the trade mark has not been created in the sense that we would talk about the creation of a copyright work or an invention. The rules relating to first ownership of trade marks are therefore concerned with use of the trade mark

and not with how the trade mark was created. In order to be entitled to ownership of a trade mark the person must be the first to use the trade mark in relation to the goods or services in question or (in the case of an application for a registered trade mark prior to the commencement of trade) the person must intend to start using the trade mark in relation to the goods or services in question.

The rules relating to the transmissibility of registered trade marks are similar to the rules relating to other forms of statutory intellectual property - registered trade marks can be licensed, assigned etc. However, where a trade mark is unregistered (that is, protected by the law of passing off and related actions) a more restricted rule applies. Because a passing off action does not provide a property right in the trade mark as such (only the 'goodwill' associated with the trade mark), it is not possible to assign an unregistered mark. Rights in an unregistered mark can only be transferred with the sale of the underlying business to which the 'goodwill' in the unregistered mark is attached.

6.7 Certification Trade Marks

A certification trade mark is a highly specialised form of trade mark that indicates that goods or services comply with certain standards, for example, as to safety, accuracy or quality. Commonly encountered examples include the Heart Foundation's 'Tick' and the 'Woolmark' logo. Well known certification trade marks in the horticulture industries are the 'Australia fresh' mark and the Australian Pome Fruit Improvement Program mark shown below. With each of these schemes certain quality parameters must be met before the mark can be used:



The difference between certification trade marks and standard trade marks is that the former can only be used where certain quality standards or conditions of use have been met. An applicant for a certification trade mark must file with IP Australia a copy of the proposed rules governing the conditions under which a trader will be given permission to use the mark and how disputes governing use of the mark are to be settled. The application and the proposed

rules will then be forwarded to the Australian Competition and Consumer Commission (ACCC) which must approve the application and the rules governing use, having particular regard to the parts of the *Trade Practices Act 1974* (Cth) dealing with anti-competitive conduct, unconscionable conduct and consumer protection.

Certification trade marks are normally administered by an independent body or organisation that does not itself trade in the relevant goods or services. Rather, the owner of the certification trade mark will give permission for use to approved users in respect of the goods and services for which it is registered. (Unusually, however, under Australian law a trader can at least in theory apply for a certification trade mark provided it also approves its use by other traders who meet the relevant standards.)

Certification trade marks can also be used as geographical indications of origin. For example, use of the designation 'Stilton' for cheese has been controlled by a certification trade mark for many years in the United Kingdom. Certification trade marks are also particularly important in relation to organic produce in Europe where the Soil Association, for example, maintains a zero tolerance threshold for GM contamination - a stricter approach than that contained in EC law governing the marketing of products as 'organic'.

6.8 Geographical Indications of Origin

Geographical indications are marks which identify a good as originating in the territory of a particular country, or a region or locality in that country, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin. Article 22(2) of the TRIPs Agreement requires Australia to allow parties to prevent the designation or presentation of goods that indicates or suggests that the goods in question originated in a geographical area other than the true place of origin in a manner so as to mislead the public as to the geographical origin of the goods.

The legal protection for geographical indications is piecemeal in Australia. Some protection is available under the tort of passing off, where producers of goods bearing the name of a particular region (eg, 'Champagne') have been able to take action against traders wishing to use that name in respect of (usually inferior) products that do not originate in that region (eg, a fizzy drink called 'Elderflower champagne').

The *Australian Wine and Brandy Corporation Act 1980* (Cth) makes it an offence to sell, export or import wine with a false or misleading description or presentation. This includes a false or misleading indication of the geographical origin of the wine. This is so, even if the

geographical indication is registered and if words such as 'like', 'style' or 'imitation' are used with the geographical indication. The Geographical Indications Committee, established under the Act, has the power to determine a geographical indication in relation to a region or locality in Australia. Certification trade marks may also protect geographical indications of origin. Actions under the *Trade Practices Act 1974* (Cth) and associated consumer protection legislation may also be used to protect geographical indications of origin.

6.9 Internet Domain Names

Internet domain names allow people to access internet sites. Many companies use their trade marks within their domain names, since this provides the simplest method of locating and accessing websites (eg www.horticulture.com.au). Domain names thus serve a similar function to trade marks in that they ensure that a company's goods and services can be located.

The allocation of domain names is the responsibility of the Internet Corporation for Assigned Names and Numbers (ICANN), which in turn allows various bodies in charge of different domains, for example the <.com.au> domain, to determine the conditions under which domain names are allocated. Certain domain names, such as those in the <.com> domain, are allocated on a first-come, first-served basis, without regard to pre-existing trade mark rights. However, if the owner of a domain name containing another's trade mark uses that domain they run the risk of trade mark infringement, although in practice trade mark infringement proceedings are rarely brought. Instead, trade mark owners often seek a transfer of the domain name through arbitration under the Uniform Domain Name Dispute Resolution Policy (UDRP), administered by ICANN. Under this policy, a domain name can be transferred if (1) it is identical or confusingly similar to a trade mark in which the complainant has rights; (2) the domain name owner has no rights or legitimate interests in respect of the domain name; and (3) the domain name has been registered and is being used in bad faith.

7 Confidential information

7.1 Information as 'Property'

Confidential information is often treated by scientists and research managers as a form of intellectual property. Although confidential information can meaningfully be treated in this way, it is important to note that the law has refused to recognise a property right in ideas or information. Instead, the law focuses on the obligation that exists between the creator or holder of information and its recipient.

This focus on the obligation of confidence rather than property in information per se has a number of important practical consequences. One such consequence is that confidential information cannot be assigned in the same way as statutory forms of intellectual property. A further consequence is that should a recipient of information receive that information free from an obligation of confidence, they will be free to use that information in any way whatsoever. A third consequence of the law's focus on the obligation of confidence rather than the information itself is that a wide range of information can be protected by the law of confidence. Technical information, such as industrial and chemical processes, mechanical techniques, recipes, and formulae, commercial information such as customer lists and sales figures, and marketing, professional, and managerial procedures can all be protected under the action for breach of confidence. The law of confidence therefore tends to be relatively unconcerned with whether the subject matter is of an appropriate type. In contrast, statutory intellectual property schemes strictly define the subject matter that can be protected.

7.2 The relationship between breach of confidence and Intellectual Property rights

The action for breach of confidence intersects with statutory intellectual property regimes in a number of ways. First, there are circumstances in which confidential information may provide an alternative method of protecting intellectual property to one of the statutory schemes. For example, there may be times at which a new production method could be protected by keeping it secret rather than by obtaining a patent over the method in question. Secondly, the law of confidential information can provide protection while an idea is still at a preliminary stage (ie before the creation of a copyright work or an invention) at a time when a potential author/inventor is seeking expressions of interest and/or financial backing.

Thirdly, confidential information can protect 'know-how' and as such is often the subject of technology transfer agreements and patent licences.

7.3 Elements of the Action for Breach of Confidence

In order to be able to maintain an action for breach of confidence it is necessary to be able to demonstrate three things: (1) that the information is confidential; (2) that it was imparted in circumstances importing an obligation of confidence; and (3) that there has been an unauthorised use or disclosure of the information.

7.4 Protectable Information

In order to establish that the information in question is capable of being protected it is not necessary to show that the information is 'absolutely' secret. It is enough to show that the information is 'relatively' secret. Under this test information may be secret in one industry but not another, in one country but not another, and at one point in time but not another.

Information can also be protected irrespective of the form in which it appears. Thus the action applies equally to information contained in written format, drawings, photographs or products. It is also clear that there is no need for the information to be fixed or in a permanent form. Information communicated orally may therefore be protected.

7.5 Obligations of Confidence

The second element that must be proved is that the recipient was under a legal (as opposed to a purely moral) obligation of confidence. In some cases an obligation of confidence will be deemed to arise automatically as a result of the type of relationship that exists between the parties. For example, the relationship between solicitor and client automatically gives rise to an obligation of confidence. An obligation of confidence will also arise where confidential information comes to the knowledge of a person in circumstances where he or she has notice that the information is confidential. For example, a person who receives an email mistakenly sent to their email address will come under an obligation not to use or disclose that information. More commonly, obligations of confidence arise contractually as the result of an express or an implied term in the contract between the parties.

7.5.1 Employees

Special consideration needs to be given to the position of employees. Different obligations are imposed on an employee during the employment and after the employment has ended. In many cases the contract of employment will include express provisions dealing with the nature and scope of the obligation of confidence owed by the employee to the employer. During the period of employment courts will enforce the express terms of the contract. Even in the absence of an express contractual obligation courts will often imply an obligation of confidence into the employment relationship. At times the courts have imposed more onerous obligations on senior employees.

Once the employment relationship is terminated different considerations apply. In particular, courts have been concerned that obligations of confidence should not prevent employees from working in the same field in the future or create too great an obstacle to mobility in the labour market. Express terms restricting what the employee can reveal or the industries in which an employee can work therefore take effect subject to the 'restraint of trade' doctrine. In practice this doctrine will prevent an employer from enforcing terms that would prevent the employee from exercising his or her ordinary skill and knowledge. In contrast, courts will enforce terms that are aimed at protecting specific 'trade secrets'. While the line between the two is often difficult to draw, the courts have indicated that trade secrets may include chemical formulae, secret manufacturing processes, specific designs and special methods of construction. More generally, it is clear that for the information to continue to be capable of protection it must be capable of being defined with some degree of precision and it is important that the information can be isolated from other information (such as the employee's stock of knowledge, skill and expertise).

7.5.2 Third Parties

A person who receives information as the result of another's breach of confidence will be restrained from using or disclosing the information once they are informed or once they should reasonably have been aware that the information was imparted in breach of an obligation of confidence.

7.6 'Ownership' of Confidential Information

When considering the 'ownership' of confidential information it should be remembered that the law has refused to recognise a property right in information per se. As has been seen, for

this reason it is not always appropriate to think of confidential information as a form of intellectual property. The practical effect of the law's refusal to treat confidential information as property is that it is not possible to deal with confidential information in the same way as 'other' IP rights. In particular, confidential information cannot be assigned. However, it remains possible to license the use of confidential information and this is a common occurrence in technology transfer agreements. The licensing of 'know-how' and trade secrets associated with patented inventions is also commonplace, and in many cases this information is as valuable, if not more so, than the information disclosed in the patent specification. In effect, the law will enforce an agreement whereby one party agrees to share information with another party in return for payment of a licence fee. Similarly, although an employer will not, in a strict sense, 'own' confidential information generated by an employee, the law will prevent the employee from revealing that information to a third party or using that information for their own benefit (but subject to important exceptions relating to mobility within the labour market, that is, 'restraint of trade').

7.7 Breach

In order to determine whether an obligation has been breached it is first necessary to determine the scope of the obligation. In some circumstances the obligation may be that the information should not be used or disclosed in any circumstances whatsoever. However, in the commercial context it is more normal that the recipient may only use the information for limited purposes, or for a limited amount of time. Where the recipient uses information for some other purpose or beyond the period allowed it will be reasonably easy to establish a breach. More difficult questions arise where the question is whether the recipient had an implied right to communicate the information to a third party, for example, to someone working within the same team within the recipient's organisation.