

Intellectual Property and the Commercialisation of Research and Development



A Guide for Horticulture Industries

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Executive Summary

These guidelines provide an overview of issues related to the management and commercialisation of intellectual property. While of general application, the guidelines should be of particular interest to organisations which have a stake in projects that generate intellectual property rights and which have an interest in ensuring that the outcomes from such projects are adopted.

The Essential Features of Intellectual Property and Acquiring Intellectual Property Rights

After outlining the nature of intellectual property rights in section 1 of these guidelines, section 2 examines the major categories of intellectual property rights. These are:

- Plant Breeder's Rights (PBR) – a highly specific branch of intellectual property which grants protection over new plant varieties that are distinct, uniform and stable;
- Patents – the branch of intellectual property dealing with inventions that are new, non-obvious and useful;
- Trade Marks – the branch of intellectual property dealing with words, logos and devices that traders use to distinguish their goods and/or services from those of other traders; and
- Copyright – the branch of intellectual property regulating the reproduction and dissemination of original literary, dramatic, musical and artistic works.

A discussion of the subject matter of the rights and detailed information about the process of acquiring the rights, both in Australia and overseas, is provided in each case. The law of confidential information, a related branch of judge-made law which imposes obligations on parties who receive information in confidence to maintain the confidentiality of that information, is dealt with separately. This is because it is not strictly an aspect of intellectual property, although it intersects with intellectual property rights in a number of ways. Related intellectual property rights such as registered designs, internet domain names, geographical indications of origin and certification marks are also considered.

Ownership of Intellectual Property

Section 3 deals with issues specifically relating to the ownership of intellectual property. These are important in circumstances where a number of parties are involved in a research project, and in particular where parties are considering commercialising research outcomes. There is a tendency to view questions of ownership of intellectual property as something governed entirely by the contractual relationship between parties. This section demonstrates some of the problems with this view, and establishes why it is important to know who is entitled to own intellectual property rights at law, in order to facilitate the management of intellectual property rights within research projects. Ownership is also important for those wanting to use other people's intellectual property as you need to know whose permission you need.

After setting out some general rules of ownership of intellectual property rights, the section focuses in detail on the ownership of the major intellectual property rights identified in the preceding section, namely patents, plant breeder's rights, trade marks and copyright, as well as the issue of whether confidential information can be 'owned'. It then looks at some of the more complex issues relating to ownership, such as: what happens when a number of parties claim to have rights in the same intellectual property; how to determine whether an intellectual property right was created in the course of employment; and the particular problems involved in attempting to resolve issues of ownership through contract.

Freedom to Operate

Section 4 examines the issue of freedom to operate. The concept of freedom to operate entails the ability to carry out research and development or commercialise a research outcome without incurring liability for infringement of intellectual property owned by a third party. Although freedom to operate may potentially arise as an issue in relation to any form of intellectual property, it is most frequently encountered in relation to patents and plant breeder's rights and the focus of this section is on these forms of intellectual property. In particular, it examines the current status of the research exemption under Australian patent law, and considers proposals for reform that have recently been formulated by the Advisory Council on Intellectual Property and the Australian Law Reform Commission. It also considers the way in which exceptions in the *Plant Breeder's Rights Act 1994* to infringement of plant breeder's rights facilitate freedom to operate in

plant breeding, and how these exemptions may be negated by contract and co-existent intellectual property rights. Finally, the section discusses the importance of freedom to operate or 'clearance' searches in the context of research proposals, and the consequences of failing to obtain freedom to operate at the outset of a research project. It also considers some characteristic warranties and indemnities found in licensing and collaborative research agreements pertaining to freedom to operate and minimising exposure to liability or loss where freedom to operate has not been secured by the licensor, collaborator or research provider.

Exploitation and Commercialisation of Intellectual Property

Section 5 considers in detail the legal issues relating to the commercialisation of research outcomes. It acknowledges that commercialisation is merely one way that research outcomes may ultimately be adopted, but also notes the importance of ensuring that commercialisation remains a possibility even where commercialisation as a strategy is only pursued on an ad hoc basis. It looks at the various ways in which intellectual property can be commercialised, namely through assignment, exclusive and non-exclusive licences, equity ownerships, partnerships and closed-loop arrangements, and the legal rules affecting each of these modes of commercialisation.

It is important to note that commercialisation is not simply a matter of contract law. There are various legal doctrines and certain legal rights that may 'trump' freedom of contract. These are:

- laws that a court may use to strike down a contract;
- various statutes that provide special protection for creators of intellectual property rights (even where the creator is not the owner of the right); and
- situations where competition law may be used to control the way in which an owner of intellectual property can deal with those rights.

Each of these issues is considered in detail.

Enforcing Intellectual Property Rights and Related Issues

Having looked at the way in which parties may choose to commercialise their intellectual property rights, Section 6 turns to the management of intellectual property. In particular, it focuses on two issues: ensuring that intellectual property registers and databases

remain accurate, and appropriate means of enforcing intellectual property rights. This latter issue is considered in detail. First, the various methods (both judicial and extra-judicial) of resolving intellectual property disputes are addressed, with particular attention paid to the procedures, costs and risks involved. The section then looks at the different remedies available to an intellectual property owner in enforcement proceedings, from interlocutory and final injunctions (which generally require the infringer to refrain from infringing the owner's intellectual property rights) to financial remedies such as damages and accounts of profits (both money sums that the infringer must pay to the owner in compensation). It also considers the possibility of bringing criminal proceedings against infringers.

1

Introduction

1.1 Nature of Intellectual Property Rights

1.1.1 Rights over Intangibles

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.

1.1.2 Property Rights

It is important to emphasise that 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.

1.1.3 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.

1.1.4 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.

1.1.5 Absolute and Relative Monopolies

A second important distinction that is normally drawn between different types of intellectual property rights is between those rights that give an 'absolute' monopoly and those rights which merely give a 'relative' monopoly. An absolute monopoly, such as a patent or a trade mark, is effective without the need to show copying or derivation from the owner. In contrast, a relative monopoly, such as copyright, is only infringed where it can be shown that the defendant copied from the owner's work.

1.1.6 Duration

Although they are a type of property, intellectual property rights are not, generally speaking, perpetual. Rather, they expire a number of years after a triggering event. In the case of patents and PBR this event is registration. In the case of copyright it is the death

of the author. Trade marks can remain protected indefinitely, but they have to be periodically renewed.

1.1.7 International Conventions and Regional Harmonisation

One of the defining features of intellectual property rights is that they are national or territorial in nature. As such they are not ordinarily effective outside of the country where they are granted/arise. This has long been a potential problem for rights-holders whose works, inventions or brands are the subject of international trade. However, there are a number of international arrangements in place that minimise some of the problems associated with the territorial limitations of intellectual property rights. These international arrangements rest on three key principles: (1) a rule of non-discrimination, such that one member state must treat nationals of another member state in the same way that it treats its own nationals; (2) minimum standards of protection; and (3) where the type of right in question is dependent on registration, streamlined procedures for obtaining registration in more than one country.

Over and above the process of national harmonisation there has also been a process of regional harmonisation. In particular, in the European Union there has been a move towards creating harmonised laws and pan-European intellectual property rights. These developments have had consequences for Australia and elsewhere as Europe uses its harmonised regimes as the basis for its trade negotiations with other countries.

2

The essential features of intellectual property and acquiring intellectual property rights

2.1 Forms of Intellectual Property and Their Acquisition in Australia

2.1.1 Plant Breeder's Rights

(a) 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.

(b) Criteria for Registration

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

- has a 'breeder';
- is 'new';
- is 'distinct';
- is 'uniform'; and
- is 'stable'.

'Breeder'

In order to be capable of protection, a variety must have a 'breeder'. *The Plant Breeder's Rights Act* 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* 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* 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*, 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* does not discriminate between varieties and, therefore, all varieties are assessed against the same criteria, regardless of the method of their origination.

'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.

'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.

'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.

'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 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.

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.

(c) 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.

Naming a new plant variety

In addition to these exclusive rights, the *Plant Breeder's Rights Act* 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.

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.

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'.

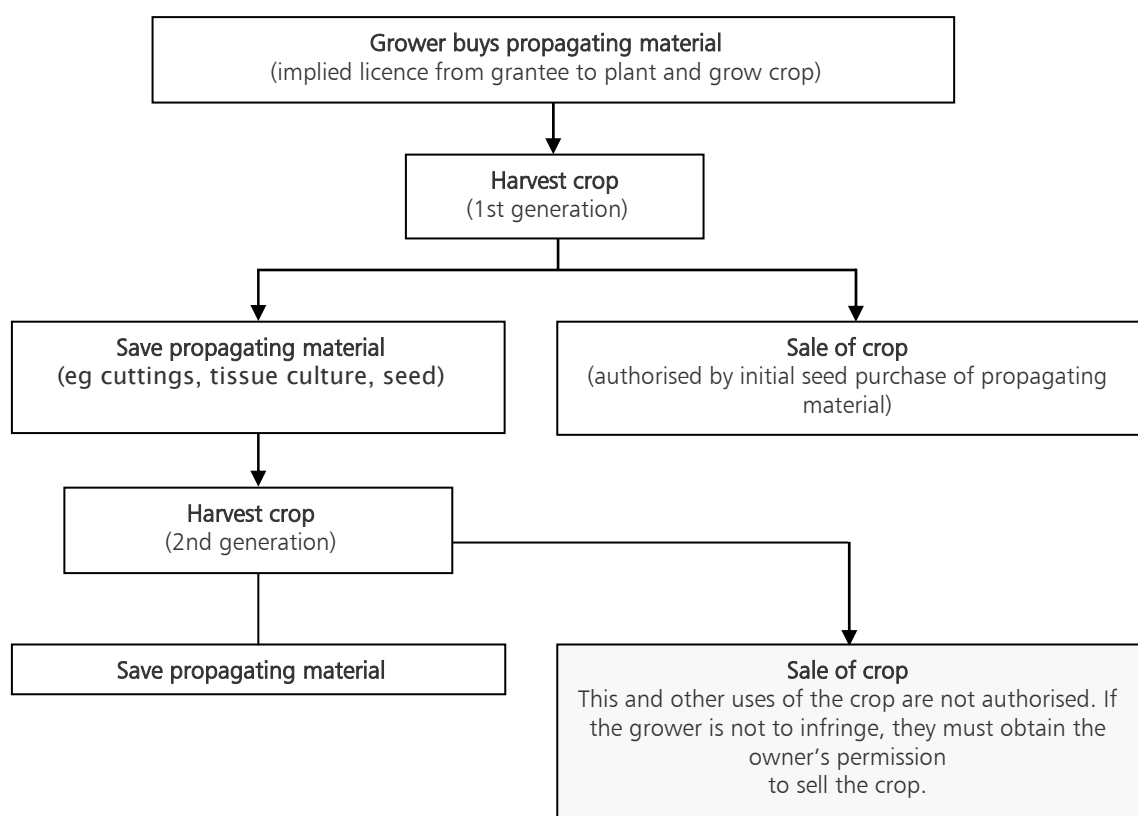
The breeder of an essentially derived or dependent variety is not prevented from obtaining PBR protection for that variety. In the case of an essentially derived variety, the owner of the protected variety from which the new variety is essentially derived may apply to the Plant Breeder's Rights Office 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.

(d) Exceptions and Limitations to Protection

The *Plant Breeder's Rights Act* 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*, 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* also makes provision for certain 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* 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.

(e) 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.

(f) 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.

2.1.2 Patents

(a) 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.

(b) *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.

'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 (see paragraph 2.1.2(f) for more on innovation patents).

Generally speaking, there has been a gradual expansion over time of what is regarded as patentable subject matter:

Year	Case	Subject Matter
1799	Hornblower v Boulton	Steam engine
1819	R v Wheeler	Method of drying and preparing malt
1842	Crane v Price	Use of anthracite in a blast furnace
1851	Electric Telegraph Co v Brett	Method of giving duplicate electric signals
1893	Moser v Marsden	Improvements in gig mills
1924	AEW's Application	Odometer
1935	Rau's Application	Selective cultivation of lupin seeds
1943	GEC's Application	Any 'vendible product'
1947	Rantzen	Modulating an electric signal
1951	Standard Oil	Improving a tract of land by applying a herbicide

1957	Lenard	A method of pruning clove trees
1961	Swift & Co	All agricultural processes, including treating animals
1961	NRDC	Any artificially created state of affairs having practical utility
1972	Joos	Cosmetic treatment of humans
1976	Rank Hovis	Mutant micro-organisms
1981	Chakrabarty	Genetically-engineered organisms
1991	IBM	A computer program for generating a smooth curve on a computer
1994	Rescare	Methods of treatment of the human body
1998	State Street	Internet business methods
2001	Welcome v Catuity	Loyalty program using a smart card
2005	Lundgren	A method of compensating a manager
Future		Stem cells?

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.

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 (see below – paragraph ©). 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.

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.

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 ALRC and the IPCRC.

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.

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).

(c) The application process

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.

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.

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.

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.

(d) 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.

(e) 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.

(f) 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.

2.1.3 Trade Marks and Related Rights

(a) 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.

(b) 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.

(c) 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.

'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).

'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* 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].

(d) 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).

(e) 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.

(f) Related Rights

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'.

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.

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.

2.1.4 Designs

Designs are protected under the *Designs Act 2003* (Cth). This Act protects the visual appearance of articles, for example, the shape of a chair or the pattern on a teapot. It does not protect the method by which an object is constructed or the functional features of an article. It should be noted that designs law in other countries is somewhat different. For example, in the European Union, it might be possible to protect some of the functional elements of a new machine, such as a combine harvester, by designs law in circumstances where the stringent criteria for patentability could not be met. In Australia, the nearest equivalent is the innovation patent (see Patents above).

2.1.5 Copyright

(a) 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 programmes; 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.

(b) 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 (see *Acquiring Intellectual Property Rights Overseas*, section 2.2).

(c) 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).

(d) 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.

(e) 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).

(f) The Economic Rights of the Copyright Owner and Infringement

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).

(g) 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.

(h) 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.

(i) 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).

(j) Copyright Ownership and Exploitation

Ownership and exploitation is dealt with in detail in sections 3 and 5, but it may be worth noting some issues at this point. 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.

(k) 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. The impact of these rights on the commercialisation of copyright material is considered in detail in section 5.5.

2.1.6 Confidential information

(a) 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.

(b) 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.

(c) 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; (3) that there has been an unauthorised use or disclosure of the information.

(d) 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.

(e) 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.

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).

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.

(f) 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.

2.2 Acquiring Intellectual Property Rights Overseas

2.2.1 Acquiring Rights Internationally

As has already been noted, there has long been interest in the international harmonisation of intellectual property rights. This has led to the introduction of several

international conventions relating to intellectual property rights. One of the founding principles of these conventions is 'national treatment' - that Member States must treat nationals of other signatories in the same way that they treat their own nationals. In relation to registered forms of intellectual property this principle only entitles nationals from other countries to apply for rights in the same way as nationals of the country in question. In recognition of the fact that this would make the acquisition of rights internationally expensive and time consuming, the international conventions also establish procedures to facilitate the grant of rights in more than one country. Different procedures apply to each of the major forms of registered intellectual property.

2.2.2 Plant Breeder's Rights

International cooperation in the PBR field takes place through the International Union for the Protection of New Varieties of Plants (UPOV). UPOV has established a detailed set of general principles for the conduct of examination of plant varieties for distinctness, uniformity and stability, and more specific guidelines for some 170 genera and species. These documents are progressively updated and extended. Their use is not limited to plant variety protection but extends to other areas such as national listing and seed certification.

The most intense cooperation between members concerns the examination of plant varieties. It is based on arrangements whereby one member conducts tests on behalf of others or whereby one member accepts the test results produced by others as the basis for its decision on the grant of a breeder's right. Australian breeders are entitled to apply for protection in all other UPOV member countries. Breeders wishing to obtain plant variety protection must make an application in that country, but, as noted above, tests conducted in one country may be accepted in others.

The UPOV Convention also facilitates the process of obtaining protection for new plant varieties in more than one country by establishing a priority filing system similar to that of the patent system. This enables an applicant seeking protection in more than one country to take advantage of the filing date of an Australian application, provided that the applicant files for protection in one or more foreign countries within 12 months of the lodgement date of the Australian application. This means that the validity of applications made in foreign countries is assessed against the lodgement date of the Australian application, rather than the date on which the applicant files for protection in

the foreign country. It should also be noted that the European Union now has a Community Plant Variety which provides protection throughout the European Union. Where protection is desired in a number of European Union countries this will be the easiest and cheapest option.

2.2.3 Patents

Although attempts to harmonise patent laws worldwide are ongoing, there is no such thing as a 'worldwide' patent. Patent protection in overseas countries can be obtained in one of two ways. The first way is to file individual applications in each country where patent protection is sought. In this case, an applicant may be able to take advantage of an earlier Australian priority date if the foreign application is filed within 12 months of the Australian priority date. This is known as a 'Convention Application'.

The second and most popular method is to file an international application under the Patent Cooperation Treaty (PCT) designating the countries where protection is sought. The PCT is administered by the World Intellectual Property Organisation (WIPO) and provides a streamlined and centralised procedure for acquiring patent protection in over 100 countries. The PCT procedure consists of two main stages: the 'international phase' and the 'national phase'.

An applicant enters the international phase by filing with IP Australia within 12 months of the priority date of their Australian application (known as the 'basic application') a PCT application specifying the member countries in which protection is sought. The priority date of the basic application is recognised in each country where registration is sought. IP Australia then forwards the PCT application to WIPO, which prepares an International Search Report (at a cost of \$1,000), indicating whether there are similar inventions in other parts of the world. After receiving the report, the applicant may request a non-binding Preliminary Examination, to alert the applicant to any problems with the application. The International Search Report and Preliminary Examination are intended to provide the applicant with sufficient guidance to determine the value of proceeding with the application. The applicant then must within 31 months of the priority date of the basic application enter the 'national phase' by furnishing each designated patent office where protection is sought with (where necessary) a certified translation of the specification together with payment of the prescribed fee. The application will then be

examined by each country where registration is sought under that country's national laws. Rejection in one country will not affect the application as a whole.

2.2.4 Trade Marks

As with international patent applications, a trade mark owner may apply for registration of a trade mark overseas in one of two ways. The first method is simply to apply individually to each national Trade Mark Office in various overseas countries where registration is sought. The second method is by making an international application under the Madrid Protocol, in which an applicant may apply for trade mark registration in up to 57 member countries through the one application.

Under this process, the applicant files an international application with IP Australia, based on an existing Australian trade mark application or registration for that trade mark. This international application designates certain countries under the Madrid Protocol where registration is sought. IP Australia then forwards the application to the International Bureau at WIPO. The International Bureau make a formalities check of the application to ensure that the correct fees have been paid and that the application is in the correct form. If there are no irregularities, the mark is entered in the International Register, and then sent to the various designated countries, where the application is examined according to each country's national laws. Each of these designated countries has a fixed period of time then to examine the application under its local laws. If these countries make objections, the International Bureau is notified, who in turn notifies the applicant. Where no refusal is notified, or if refusal is withdrawn in a designated country, the International Registration shall have the same effect as a national registration in that country.

The key advantages of making an international application under the Madrid Protocol are convenience and the ease of amending the international registration to add new countries or to change ownership. The key disadvantages are that acceptance of the international application is dependent on the validity of the Australian application or registration, and if the Australian application is rejected or the registration is revoked this in turn will cause the International Bureau to cancel the International Registration. Further, some of Australia's major trading partners (such as USA, Canada, New Zealand) are not yet members of the Protocol.

2.2.5 Copyright

As an unregistered form of intellectual property, different considerations apply to copyright. The principle of national treatment means that, generally speaking, there is no need to take any special steps in order to acquire copyright protection overseas. For example, a research paper created by an Australian author will automatically acquire copyright protection in all other signatories to the Berne Convention, which is the major international copyright agreement (signatories include all the member states of the European Union, Canada, China, India, Japan and the United States).

However, it is important to note two further points. First, copyright laws differ as to the subject matter that is protected. For example, many countries, including the United States and the European Union, have a more restrictive approach towards granting copyright in databases. Thus, some works that receive copyright protection in Australia may not be protected overseas (the principle of national treatment is not implicated because these countries treat all databases in the same way). Secondly, although it is never necessary to register copyright in order to get protection overseas, some countries, including Canada and the United States, maintain a registration system. Although registration is not absolutely essential in these countries it does confer a number of benefits. For example, without registration in the United States an owner may receive less damages and will not be awarded costs in copyright infringement proceedings.

3

Ownership of intellectual property

3.1 Introduction

3.1.1 The Rules Regulating Ownership

When thinking about whether and how to commercialise research outcomes it is essential that attention be paid to questions of ownership of intellectual property rights. Questions of ownership are resolved in three different ways. First, there are various statutory rules governing both first ownership and assignment of intellectual property rights. Second, there are various common law (ie judge-made) rules governing questions of ownership. Third, questions of ownership are frequently governed by contract. There is perhaps a tendency to view questions of ownership solely in terms of the contractual relationship between the parties. However, it is also important to understand the other ways in which the law governs questions of ownership. In particular:

- When negotiating ownership by contract it is essential to understand who would be entitled to ownership in the absence of agreement - this is vital in ensuring that contractual negotiations take place between the correct parties and that all the people who would be entitled to a share of ownership in the absence of agreement are bound by the agreement. For example, an agreement between an Research and Development Corporation and a university on division of ownership will not have the desired effect if the university is not entitled to negotiate on behalf of the researchers;
- When negotiating ownership it can be extremely useful to have an understanding of how statute and common law deal with questions of ownership, because these legal rules form the basis from which the parties are negotiating. There is good evidence that the agreements that parties reach are in part conditioned by their understanding of what their 'rights' are;
- Should the parties fail to reach agreement on questions of ownership (and there are circumstances where this can occur by accident) then the statutory and common law rules will apply;

- The validity of certain contractual terms and conditions will be governed by statutory and common law rules; and
- Statutory and common law rules that determine what rights an owner has. For example, whilst a contract may determine that two parties are co-owners of intellectual property, it is still necessary to look to statutory and common law rules to determine what rights a co-owner enjoys.

3.1.2 General Rules of Thumb

It is important to appreciate that the rules governing the ownership and assignment of intellectual property rights in Australia vary between different forms of intellectual property. Moreover, rules as to intellectual property ownership remain largely outside the international harmonisation of intellectual property rights. Consequently, rules on ownership vary dramatically between different countries. Nevertheless, it is possible to identify some very general rules of thumb that are useful when thinking about ownership issues:

- Except where a work is made in the course of employment, the person entitled to first ownership of an intellectual property right will be its creator(s), that is, the person or group of persons most directly responsible for the production of the work, invention etc;
- Where a work is made by an employee in the course of his/her employment the person entitled to first ownership will in the absence of an agreement to the contrary be the employer;
- Intellectual property rights are a type of property and, generally speaking, they can be dealt with in the same way as any other form of property. Intellectual property rights can be bought and sold, licensed, mortgaged or bequeathed by will;
- Under Australian law (as in other common law jurisdictions) it is possible to assign ownership in an intellectual property right that has not yet come into existence (eg an invention that has been created but not yet been registered);
- There are some rules under Australian law that regulate the form and content of agreements dealing with intellectual property rights. For example, in relation to the form of an agreement, there are rules regarding formalities for assignments of intellectual property rights (generally speaking a contract of assignment has to be

signed writing in order to take effect). Competition law and common law rules relating to restraint of trade may impact on the content of agreements dealing with intellectual property rights. Other countries, however, go much further in regulating the content of intellectual property agreements and have special principles of contractual interpretation that have no equivalent under Australian law. In particular, many civil law countries (such as France and Germany) have special rules dealing with contracts relating to copyright. These rules are designed to protect the authors of copyright works and are intended to address an alleged inequality of bargaining power as between authors and publishers etc; and

- A further, related, issue is that some types of intellectual property create separate protection for the creators of the 'thing' in question (who may or may not be the owner of the intellectual property). In other words, even though the property may have been vested in or may have been transferred to another person, the author or inventor may retain certain rights in relation to how the property is dealt with or managed. Australian law has generally been reluctant to recognise such rights, but the position is changing. Most notably, recent amendments to the *Copyright Act* have seen the introduction of 'moral rights' for authors. Moral rights and related forms of protection overseas can have an important impact on the management and commercialisation of intellectual property rights. (This issue will be discussed in detail in section 5.5).

In the following sections the rules relating to each of the major forms of intellectual property are considered in more detail.

3.2 Ownership of Plant Breeder's Rights

The *Plant Breeder's Rights Act 1994* (Cth) provides that a breeder of a plant variety, or a person who has acquired the right in the variety, can apply under the Act for PBR. In practice this means that a PBR can be applied for by an individual breeder or an employer where the variety was developed in the course of employment, or by an assignee. PBRs can be dealt with in much the same way as patents or copyrights (as outlined below), that is, they can be assigned, licensed, mortgaged etc.

3.3 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 (see section 3.8).

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. Such rights explored in detail in section 5.5.2.

3.4 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.

3.5 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.

3.6 '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' – see section 3.8.2).

3.7 Co-ownership and Joint Ownership of Intellectual Property Rights

Implicit in much of what has been said above is that the law allows joint or co-ownership of intellectual property rights. It is important to appreciate the rights each co-owner will enjoy.

3.7.1 Plant Breeder's Rights

As is the case with patents, a plant breeder's right can be granted to two or more breeders who, either jointly or independently, bred a new variety, unless the variety was bred in the course of performing duties as an employee. In the latter case, the employer is entitled to make an application for the grant of PBR in the variety, or to have the PBR assigned to them. Unlike the situation with patents, however, if two or more persons bred a plant variety jointly, one of those persons is not entitled to apply for the grant of PBR in the variety otherwise than jointly with, or with the consent in writing of, each

other of those persons. Where two or more persons lodge a joint application for the grant of PBR, PBR will be granted to them jointly. Without any agreement to the contrary, joint owners will be presumed to own the PBR in equal shares.

The right to apply for the grant of PBR can be assigned to another party, as can a PBR once granted. However, in both instances the assignment must be in writing signed by or on behalf of the party making the assignment.

3.7.2 Patents

A patent can be co-owned, either on the basis that more than one inventor contributed to the invention, or that the patent has been assigned to more than one owner. Disputes frequently arise as to whether a person that has contributed to the development of an invention is entitled to the grant of a patent. In resolving these disputes the Patent Office applies the 'material effect' test. A person is entitled to a patent under this test where that person's contribution, either solely or jointly with others, had a material effect on the final concept of the invention. Generally speaking, a person will have a material effect upon an invention where the invention could not have occurred without that person's involvement. This contribution may or may not involve the taking of an inventive step, but must consist of something more than merely following the instructions of others in performing experiments.

Where an invention has two or more inventors they will hold the patent jointly in equal, undivided shares irrespective of the value of their respective contributions. However, co-owners can agree as to the shares of ownership of the patent. Importantly, a co-owner of a patent is entitled to exploit the patent independently of the other co-owners but cannot grant a licence or assign an interest in it without the consent of the other owners, subject to any contrary agreement. This is the case regardless of each party's respective shares in the patent. If the parties own unequal shares, there will be a presumption that the parties are responsible for paying maintenance fees in accordance with their shares. Generally, one co-owner can sue for infringement of the patent, but must join the other co-owners in the proceedings.

3.7.3 Trade Marks

In contrast to the situation which obtains in relation to other forms of intellectual property, trade mark rights are granted to the person who first uses the mark in Australia, irrespective of who has actually developed it or whether the mark has been used overseas. As such it is, generally speaking, not possible for a registered trade mark to be jointly owned.

A registered trade mark can be assigned, as can the right to apply for registration of a trade mark. However, where a trade mark is assigned without the goodwill of a business it is important that the party making the assignment puts in place safeguards in order to prevent deception or confusion of the public, or the development of some other ground for rejection or removal of the trade mark. Whilst an assignment of a registered trade mark need not be in writing, the Registrar of Trade Marks will require some proof of the assignee's title. Certification trade marks cannot be assigned without the permission of the Australian Competition and Consumer Commission.

3.7.4 Copyright

In copyright, co-ownership may come about in one of two ways – because of the joint creation of the work, or because an interest is assigned to more than one person or organisation. Joint authorship arises where the contributions of the authors are inseparable from each other and, subject to rules governing employee works, each joint author becomes a joint owner of copyright in the work. Generally, some contribution to the actual form and content of the copyright work (rather than the contribution of mere ideas) is required for a person to be considered an author. Without any agreement to the contrary, joint owners will be presumed to own the copyright in equal shares, however, in exceptional cases a court might conclude that they hold the copyright in proportion with their contributions. It is therefore preferable if this issue is resolved contractually.

In contrast, when the contributions of two or more authors to a work are distinct from each other (for example, separate chapters of a collection where the authors of individual chapters are identified), the authors become co-authors of the resulting work and, subject to rules governing employee works, co-owners of the copyright in the work. Co-owners only have rights in respect of the part of the work that they actually own, and

can therefore only sue for infringement and assign or license rights in respect of their part of the copyright work.

3.7.5 Confidential Information

As we have noted earlier, Australian courts have thus far refused to recognise property rights in ideas or information. Instead, the focus of the law in this area is upon the obligation that arises when one party communicates secret information to another in confidence. As a consequence information cannot be 'owned' in the same way as other forms of intellectual property. Questions therefore frequently arise as to who 'owns' confidential information. The issue of ownership is frequently resolved by contractual agreement. For example, it will usually be an express term of an employment contract that any information discovered or created by an employee in the course of their employment will 'belong' to the employer. Where joint effort has produced the information and no agreement can be discerned on the matter, the position appears to be that each of the parties concerned will be able to enforce confidentiality against others to whom they make disclosures, but not against each other.

In relation to confidential information, the question of ownership is usually posed in terms of which person(s) have standing to commence legal proceedings to enforce a duty of confidence. That duty usually arises through possession of secret information, no matter how the information came into existence. Generally speaking, any person who would be prejudiced by disclosure or use of the information by another person will be entitled to commence proceedings to enforce a duty of confidence.

3.8 Further Issues

3.8.1 Overlapping Ownership

One general difficulty is that researchers are frequently employed by, or have connections with, a number of different entities. For example, it is not uncommon for an academic to be employed by a university and have some form of commercial relationship with a Co-operative Research Centre (CRC). In a case where a researcher works for more than one organisation, that researcher may have entered into more than one contract in which it is stated that any intellectual property rights arising out of work done by that researcher belong to the other contracting party. For example, a university may be entitled to

intellectual property created by an academic in the course of employment, but simultaneously, a CRC may be entitled to an assignment of intellectual property created by the academic in the course of a CRC project.

In practice, it can be difficult, if not impossible, to determine where an academic's work for a university ends and his/her work for CRC begins. Because this is an unusual state of affairs, there is a danger that standard form commercial contracts will not adequately resolve these issues. Nor, for reasons that are explored below, can these problems be resolved merely by parties agreeing with the research provider who is to own the intellectual property. Thought therefore needs to be given to mechanisms capable of dealing with this unusual situation.

The most important first step is to have a procedure for identifying all of the parties who may be entitled to a share of any intellectual property rights, and then to ensure that all of these parties reach agreement on ownership. In the absence of such agreement, an organisation may discover that some other party is entitled to a share of ownership, or even in some cases be liable for inducing a breach of contract. Careful thought also needs to be given to the formal legal structure of the entities with which parties are negotiating. In particular, difficulties may arise in respect of unincorporated CRCs.

3.8.2 'The Course of Employment'

Even if a contract stipulates that an employer owns the intellectual property of an employee, this will only be the case if the employee is acting in the course of his or her contract of employment when creating the intellectual property. In many cases it will be obvious that the work was made by an employee in circumstances where the employer is entitled to ownership. There are, however, some situations where determining ownership can be much more difficult. In particular, difficulties can arise where an employee creates a work or invention that is remotely related to the employer's business outside of ordinary office hours. Similarly, problems can arise where the employee occupies a position within an organisation where the production of works or inventions is not to be expected. Difficulties can also arise where there is some doubt as to whether the individual in question is to be treated as an employee or an independent contractor/consultant.

There is no clear way of determining when a particular course of conduct will or will not be considered to be part of an employee's course of employment. In the patent and

copyright context a number of factors have been taken into account by the courts in determining this, such as:

- the nature of the employee's position in regard to the business in which he or she is employed. For example, in some cases the courts have indicated that more senior employees are more likely to be treated as having made the work for the benefit of the employer;
- what the employee was engaged for and instructed to do during the time of his or her employment, in particular whether the employee was directed to apply his or her mind for the purpose of devising anything in the nature of an invention or copyright material;
- the extent to which the invention or copyright material was created during ordinary working hours; and
- whether the inventor used the materials and facilities of his or her employer.

None of these factors is determinative, and the courts have indicated that this is not an exhaustive list of factors.

Further, there is no absolute means of determining when an inventor will be an employee as distinct from independent contractor/consultant. The courts have indicated that the following factors will be relevant to determining whether a party is an employee:

- an employer has the right to control how, when and where work is done;
- an employer generally supervises the conduct and work of their employees;
- an employee is paid by salary or wages and not by reference to completion of tasks;
- an employee performs duties in furtherance of the employer's business rather than operating on their own account;
- an employee is represented by the employer to the world at large as an 'emanation' of the employer's business;
- an employer provides and maintains equipment for employees to use;
- an employer sets the hours of work and provision for leave;
- an employer is responsible for the deduction of income tax and the payment of superannuation contributions;

- an employer has the right to delegate work; and
- an employer has the right to suspend or dismiss the employee for misconduct or poor performance.

3.8.3 Resolving Ownership through Contract: Difficulties and Pitfalls

As we have already indicated, it cannot be assumed that all issues relating to the ownership of IP can be resolved through contract. In particular, there are three key issues that need to be borne in mind:

- First, it must be remembered that the law imposes obligations as to the form of certain contracts dealing with ownership of IP rights. As noted above, the general rule is that contracts for assignment must be in writing and signed, but this is merely a rule of thumb, and it is important to be aware of the specific rules dealing with each of the forms of IP.
 - *Plant Breeders' Rights*: an assignment of a PBR (or of a PBR that has not yet come into existence – that is, in formal legal terms a right to apply for a PBR) only has legal effect if it is in writing and signed by both the assignor and the assignee. An assignment of a PBR must be entered in the Register of Plant Varieties maintained by IP Australia. An important consequence of failing to register the assignment is that the assignee of PBR cannot enforce its rights until the assignment is entered in the Register.
 - *Patents*: an assignment of a patent (again, including a future invention) must be in writing and signed by or on behalf of both the assignor and assignee. To be legally effective, an assignment of a patent must be entered in the Register of Patents maintained by IP Australia. As with PBR, an assignee of a patent cannot enforce its rights until the assignment is entered in the Register.
 - *Registered Trade Marks*: there is no formal requirement that an assignment of a registered trade mark or an application for registration be in signed writing. However, assignments of registered trade marks and applications for registration must be recorded by IP Australia, and IP Australia requires documentary evidence as proof of the transfer of ownership. A certification trade mark can only be assigned with the consent of the ACCC. A collective trade mark cannot be assigned.

- *Copyright*: an assignment of copyright (including for a work that has not yet come into existence) only has legal effect if it is in writing and signed by the assignor.
 - *Confidential Information and Unregistered Trade Marks*: confidential information and unregistered trade marks cannot in a formal sense be assigned.
 - *Agreements not complying with the above formalities*: what is stated above does not mean that oral or unsigned agreements to assign are of no effect. The law has certain mechanisms to deal with a situation where the parties have failed to comply with legal formalities – the law will often treat agreements that do not comply with necessary formalities as binding 'in equity', and hence you may encounter reference to 'equitable assignments'. It is important to emphasise, however, that the recognition of such 'equitable assignments' is by no means automatic and that even if there has been an 'equitable assignment', the rights obtained are far less certain and are liable to be overridden by a third party acting in good faith in relation to the property in question.
- Second, a party can only assign what the party actually owns. It is therefore essential that all of the persons entitled at law to a share in the ownership of the intellectual property are included in any contractual negotiations. For example, an agreement between a university and an RDC to share ownership would not have the desired effect if the university is not entitled to negotiate on behalf of the researchers. This might occur if one of the researchers is a PhD student who is entitled to retain ownership of any intellectual property rights. Similarly, it is possible that a researcher might be employed by the university but that the work or invention is made in the course of his/her employment with a CRC or other organisation.
 - Third, in light of the above difficulties, there might be a temptation to attempt to determine in the contract who will be the 'inventor'/author'. For example, a contract between an RDC and a university might state that it is only academic staff and not research students who are to be treated as 'authors'/inventors'. Again, however, this term will not have the desired effect where:
 - the contract could not bind individuals not party to the agreement (for example, the situation involving the PhD student described above); and

- even between parties to the contract, there is reason to believe that the issue of who is an author/inventor is not capable of being determined by contract. These questions are to be determined by law and it is only through assignments and licences that determination of questions of ownership can be effected by contract.

3.8.4 Renegotiation of Research Contracts

A final issue here is ensuring that a person renegotiating a research contract has authority to be able to do so. The general rule is that a person is entitled to assume that someone who is 'held out' by an organisation as being entitled to negotiate on that organisation's behalf has the authority to be able to do so. This is regardless of whether or not that person being 'held out' does in fact have actual authority to act on his or her organisation's behalf. It is difficult to determine when a person will have been 'held out': the courts have established that no assertion by the purported agent him or herself will suffice, since the holding out must come from the organisation. This will depend in part on matters such as the position of the purported agent within the organisation, the nature and scope of the negotiations, and the parties' customary dealings. Only if a person has notice of the fact that the agent has not been held out by his or her company will any renegotiations undertaken by the purported agent not be binding on his or her company.

Because of the lack of certainty surrounding the concept of 'holding out', organisations need to have clear rules and procedures in place as to which persons within the organisation have the authority to renegotiate contracts, and the point at which renegotiation needs to be formally approved by more senior management and/or the legal team.

4

Freedom to operate

4.1 Introduction

Freedom to operate refers to the ability to conduct research and development, commercialise a research outcome or use another person's intellectual property in your business without infringing intellectual property owned by a third party. Frequently, securing freedom to operate involves obtaining licences or assignments of intellectual property from a number of different sources. Whilst freedom to operate may potentially arise as an issue in relation to any form of intellectual property, it is most frequently encountered with patented inventions and plant varieties protected by plant breeder's rights.

4.2 Freedom to Operate and Plant Breeder's Rights

In contrast to the patent system, the *Plant Breeder's Rights Act 1994* contains a number of exemptions to the exclusive rights enjoyed by owners of new plant varieties which are designed to facilitate freedom to operate in plant breeding. In particular, the *Plant Breeder's Rights Act* 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 plant varieties;

do not constitute an infringement of PBR in a protected variety. This means that a protected variety 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.

However, freedom to operate may nevertheless be inhibited where the development of a new variety requires repeated use of a protected variety (for example, in the development of hybrid varieties) or where a new variety is essentially derived from a protected variety. The breeder of essentially derived varieties can obtain PBR but cannot commercially exploit the variety without the permission of the owner of the variety from which it was

essentially derived if the original breeder has sought a declaration of essential derivation. At the time of writing no applications for declarations of essential derivation have been made. In relation to dependent varieties, the PBR of the initial variety also extends to a dependent variety so the owner of the latter cannot exploit it without the permission of the initial variety owner.

The Plant Breeder's Rights Office envisages that any dispute regarding dependency or 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 dependency or 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.

Freedom to operate may also be hindered where research involving a protected variety is simultaneously protected by both patent and PBR (for example, a genetically-modified plant containing a patented gene). It is common for breeders of genetically-modified varieties to apply for both patent and PBR protection to ensure that the breeder has some amount of protection in the event that the patent does not proceed to grant or is revoked at a later stage following legal challenge. Where concurrent protection of a variety under patent and PBR exists, any research involving use of the protected variety may give rise to liability for patent infringement. In those circumstances, the freedom to operate provided by the *Plant Breeder's Rights Act* will effectively be negated by the existence of the patent.

In addition, freedom to operate may also be restricted by the terms of a licence for use or propagation of a plant variety, whether protected by PBR or not. It is common, for example, for the breeders' exemption under the *Plant Breeder's Rights Act* to be excluded by the terms of a licence for a protected variety. In those circumstances, the terms of the licence agreement will override the exceptions to infringement contained in the *Plant Breeder's Rights Act* and freedom to operate will have to be renegotiated with the PBR owner

4.3 Freedom to Operate and Patents

Contrary to a widely-held perception, the use of a patented invention in non-commercial settings, such as universities, or in research having no immediate commercial outcome, is not exempt from patent infringement. In Australia, there is no formal research exemption in the *Patents Act* 1990, although there is case law from the nineteenth century which suggests that bona fide use of a patented invention with a view to improving upon it, or ascertaining whether an improvement can be made, does not constitute patent infringement. Whilst this decision has been applied in both the United Kingdom and New Zealand, it has not been considered by any Australian court. Confusion therefore exists as to the applicability of this authority to the current research environment, given the period of time which has elapsed since the cases in question were decided, and the vastly different circumstances in which research is currently conducted.

Whilst many patent owners have in the past been prepared to turn a blind eye to exploitation of patented inventions in universities and non-commercial settings, there has been a reversal of this trend in recent years. A prime example of this is the decision taken by Melbourne based company, Genetic Technologies Ltd, to extract from academics and non-profit organisations a 'nominal' licence fee of US\$1,000 for research involving non-coding DNA, over which it holds several patents.

The issue of whether a formal research exemption should be introduced into Australian patent law was recently considered by both the Australian Law Reform Commission (ALRC) and the Advisory Council on Intellectual Property (ACIP). The ALRC recommended that a formal research exemption be introduced, and that this exemption should apply irrespective of whether the research occurs in a commercial context or might potentially have commercial applications. However, the ALRC recommended that the proposed exemption should only have effect where research is carried out on the patented invention (eg for the purpose of finding out something unknown about the invention or testing a hypothesis relating to the invention), as opposed to the situation where research is carried out with the patented invention. This would mean that whilst research upon a patented gene or chemical compound with a view to identifying further properties or functions of the gene or compound would not constitute an infringement under ALRC's proposal, research which makes use of patented research tools (for

example, the use of polymerase chain reaction in DNA amplification) will constitute patent infringement.

The approach advanced by the ALRC accords with the approach to experimental use applied by a number of European countries, which similarly draw no distinction between commercial and non-commercial research. It is, however, at odds with the approach taken by courts in the United States where, like Australia, no formal, statutory research exemption exists. In the recent decision of *Madey v Duke University*, the United States Court of Appeals for the Federal Circuit stated that the experimental use exception under United States patent law is 'strictly limited' and 'truly narrow', and has no application where the use has 'the slightest commercial application' or where the act is done 'in furtherance of the alleged infringer's legitimate business interests'. In essence, use of an invention protected by a United States patent will only be exempted from infringement where that use is for amusement, to satisfy idle curiosity, or for strictly philosophical inquiry. Significantly, the Court held in *Madey v Duke University* that the activities of universities are often inherently commercial, and, as such, use of patented inventions by academic scientists and researchers in the United States will not be exempt from infringement under United States patent law.

More recently, ACIP supported the ARLC's recommendation for the introduction of a formal research exemption in the *Patents Act 1990*. However, ACIP took the view that the approach formulated by the ALRC was problematic because it will often be difficult to distinguish experimentation 'on' an invention from experimentation 'with' an invention. Instead, it proposed the following test:

'The rights of a patentee are not infringed by acts done for experimental purposes relating to the subject matter of the invention that do not unreasonably conflict with the normal exploitation of a patent.

Acts done for experimental purposes relating to the subject matter of the invention include:

- determining how the invention works;
- determining the scope of the invention;
- determining the validity of the claims; and

- seeking an improvement to the invention.

Whilst ACIP expressed concern that the test proposed by the ALRC may lead to uncertainty, the alternative test proposed by ACIP gives rise to uncertainties of its own. For instance, it is far from clear what constitutes 'unreasonable' conflict with the 'normal' exploitation of a patent. Moreover, it is apparent from the examples listed above that the test proposed by ACIP is potentially narrower than the test recommended by the ALRC. For instance, experimentation on a patented gene or chemical compound would not appear to be exempt from infringement under the ACIP proposal unless that experimentation was undertaken with a view to ascertaining how the invention works or determining the scope of the invention. However, the right to carry out experimentation of this nature is arguably already implicit in the requirement to lodge a patent specification before patent protection is granted. Research directed to ascertaining further properties or functions of a patented gene or compound would also appear to be outside the scope of the ACIP proposal unless this can be considered as an 'improvement' to the invention.

It remains to be seen whether the Federal government will accept the ALRC's and ACIP's recommendations and, if so, which formulation it is likely to prefer (if other). In the meantime, the law relating to experimental use of a patented invention in Australia remains uncertain, and the unauthorised use of patented inventions in research should be approached with caution.

4.3.1 Securing Freedom to Operate

Before commencing a research project, a freedom to operate or 'clearance' search should be undertaken. A clearance search aims at locating patents that are currently in force with a view to ascertaining whether the research project is likely to infringe the claims of any existing patents. The search should not be limited to the location in which the research is undertaken, but should also include those countries in which any research results may be commercialised. Because patent applications are generally not published until approximately eighteen months after their priority date, clearance searches should continue to be carried out throughout the life of a research project.

Ideally, the search should not be limited to discovering relevant patents, but should also include some analysis of the validity of those claims which might potentially be infringed.

This task, as well as the search itself, is usually carried out by a patent attorney at a cost of between approximately \$2,000 to \$8,000 depending on the number of patents discovered and the quality of analysis. Once the clearance search and analysis has been completed decisions can then be made on what licences are required, what patents can be worked around, what patents can be ignored, and whether or not the project will go ahead.

Failure to obtain freedom to operate or to perform clearance searches at the outset of a research proposal can have drastic consequences: it may jeopardise completion of the research project and any expenditure already incurred, and may also expose those conducting and/or funding the research to liability for patent infringement, possibly involving litigation. Patent infringement litigation is notoriously expensive. A report into the cost of patent litigation in 1993 estimated that the average cost of patent litigation varied between \$50,000 and \$250,000, whilst more recent estimates place the cost between \$750,000 to \$1,000,000.

There are a number of options available where freedom to operate is impeded by intellectual property owned by a third party. The primary option in most circumstances is to seek a licence from the patent holder to use the patented invention. Another option for those holding their own IP portfolio is to negotiate a cross-licence with the patent holder. Alternatively, if the patent is of great value to the research project, the company may attempt to obtain an assignment of the patent from the patent owner. Where possible, a further option is to attempt to 'invent around' the patent or, if the patent holder is unwilling to grant a licence or refuses to licence on reasonable terms, a compulsory licence may be sought, although the difficulties associated with obtaining compulsory licences of patents in Australia are formidable. A final option is to ignore the patent and proceed with the research, and then bring revocation proceedings if challenged by the patent holder or, where the patent has not proceeded to grant, seek to oppose the grant of the patent in opposition proceedings. However, this option should only ever be countenanced where advice is received to the effect that the patent or the patent application is not a strong one.

Ultimately, the option chosen will depend on a careful cost/benefit analysis of the relevant merits of each available option, including the possibility of abandoning the project.

4.4 Warranties and Indemnities

Where a licence is taken from the owner of intellectual property to secure freedom to operate, it is common practice to obtain from the owner certain warranties and to incorporate these into the licence agreement. A warranty is a term of a contract that is collateral to the main object of the contract, and can be contrasted with a condition, which is a term of such fundamental importance that a breach of it gives rise to a right to terminate performance of the contract. In contrast, breach of a warranty generally entitles the party affected by the breach only to damages.

Some characteristic warranties found in licence agreements include warranties to the effect that:

- neither the execution of the licence or the performance of the agreement by the licensor will cause it to be in breach of any agreement to which it is a party or is subject;
- full details of all trade secrets relevant to or necessary for the exploitation of the patent have been disclosed;
- the licensor has and for the duration of the licence will continue to have full right and title to the intellectual property and any associated trade secrets;
- the intellectual property being used is absolutely free from encumbrances;
- all maintenance fees due in respect of the patent have been paid;
- the use and licence for use by the licensee of the intellectual property and any associated trade secrets will not infringe any intellectual property rights of any person, nor give rise to payment by the licensee of any royalty to any third party or to any liability to pay compensation;
- the licensor is not aware of any fact by which the patent or PBR may be declared invalid, or any claim by which the patent or PBR should be amended; and
- (where the licence is an exclusive licence or the intellectual property is being assigned) no other licences or user rights have been granted by the licensor/assignor to any other person in relation to any rights, title or interest in the patent.

In addition, appropriate indemnities should be obtained from the licensor which insure the licensee against, for example, any losses, claims, judgments or other liabilities arising directly or indirectly out of or in conjunction with any breach by the licensor of any of the warranties given by the licensor.

In many instances, the licensor will seek to resist the giving of warranties or to qualify their potential exposure to liability under them. However, a properly conducted and thorough freedom to operate/clearance search will in the majority of cases negate the necessity of obtaining wide-ranging warranties. Where this is not done, warranties will effectively perform the role of freedom to operate questions, or provide reassurance where the results of freedom to operate searches are uncertain. Moreover, the preparedness of the licensee or research provider to provide certain warranties will often depend on the maturity of the technology involved. For example, where the technology to be licensed or assigned is relatively new or in the early stages of development the licensor or vendor may be justifiably reluctant to warrant that the patent is valid or that the exploitation of the technology will not infringe the rights of any third party. Alternatively, the licensor or assignor may attempt to qualify or limit any such warranty; for example, by stating that the facts warranted are true 'to the best of licensor's/assignee's knowledge after having made proper inquiry'.

In a collaborative context, it is also important to ensure that appropriate warranties are obtained from research partners/providers in relation to any 'background' intellectual property which they may bring to the project, and also in relation to any intellectual property which they propose to exploit during the project. Some common warranties found in agreements relating to such projects include:

- that the research partner has absolute, unencumbered title to any background intellectual property that will be exploited during the course of the project;
- that the research partner is not aware of any fact by which the background intellectual property may be declared invalid, or any claim by which the intellectual property should be amended;
- that the research partner is entitled to make all patent applications which it has made, and none of the inventions which are the subject of any such application are part of the state of the art;

- that the exploitation of the background intellectual property will not infringe any intellectual property rights of any person, nor give rise to payment by the research partner of the any royalty to any third party or to any liability to pay compensation;
- (where the research project will require the use of intellectual property to which the research partner does not have title) that the research partner has made proper inquiry to ascertain whether completion of the research proposal will cause the research partner to infringe any intellectual property rights of any person, nor give rise to payment by the licensee of the any royalty to any third party or to any liability to pay compensation; and
- that, having made proper inquiry, the research partner has or will procure all necessary licenses or permissions to exploit the intellectual property rights of any person necessary for completion of the research project.

Appropriate indemnities in the form described above should be obtained from the research partner.

4.5 Permission to Operate

Freedom to operate should be distinguished from permission to operate. Freedom to operate from the point of view of intellectual property rights does not necessarily clear the way to develop and commercialise a new technology. There may be a range of government regulations, industry guidelines and ethical standards with which to comply before permission to operate is granted. For example, approval from the Office of the Gene Technology Regulator is required before a genetically-modified plant can be placed on the market. A clearance search should therefore include an assessment of where permission to operate may be required.

Funding proposals should therefore include (where appropriate) warranties that all necessary ethics clearances have been obtained, as well as undertakings to obtain certification and/or regulatory approval where commercialisation of any technology resulting from the research project is envisaged.

5

Exploitation and commercialisation of intellectual property

5.1 Introduction

This section examines legal issues relating to the commercialisation of research in more detail. The legal issues arising out of commercialisation can be subdivided as follows:

There are a number of different paths by which research can be commercialised. Each of these paths or modes of commercialisation takes place against a backdrop of legal rules dealing with what type of entities enjoy legal personality (and thus can enter into contracts etc in their own right), how ownership of company or partnership property is determined and divided (including when a company or partnership is wound up), and who has the power to act on behalf of a company or partnership.

Most modes of commercialisation are ultimately dependent on the transfer of property to another entity or granting to another entity the right to use the underlying intellectual property – that is, granting a licence. As was seen in section 3, the law places some controls on the form that an assignment or licence can take and these rules apply as much to the transfer of rights to a third party as they do to the transfer of rights between the creator and the 'first' owner of intellectual property rights.

The law has certain doctrines and provides certain rights that can 'trump' freedom of contract. These can be divided into three categories:

- First, there are various common law rules that a Court can use to set a contract aside. These rules are particularly important as between the creator of intellectual property rights and the 'first' owner.
- Secondly, there are various statutory regimes that provide protection for the creators of intellectual property, even in circumstances where the creator is not the owner (eg 'moral rights'). As was noted in section 3, Australian law has generally been reluctant to recognise such rights, but the position is changing. Most notably, recent amendments to the *Copyright Act* have seen the introduction of 'moral rights' for

authors. Moral rights and related forms of protection overseas can have an important impact on the management and commercialisation of intellectual property rights.

- Thirdly, there are situations in which competition law can be used to control how an owner of intellectual property deals with its rights. Unlike the first and second categories referred to above, competition law chiefly applies as between the owner of the right and a third party and, in particular, where the third party is seeking a licence from the owner, but the owner has refused to grant a licence or has only offered a licence on terms that the third party regards as unreasonable. It should be noted at the outset that the relationship between intellectual property rights and competition law is inherently complex. At the heart of this complexity lies mutually incompatible starting points – competition law is principally concerned with control of monopoly power, whilst intellectual property rights are designed to grant monopolies.

The other issue dealt with in this section is the relationship between decisions not to commercialise intellectual property rights. Decisions not to commercialise raise two quite different sets of issues. First, a failure to *exploit* intellectual property rights can have legal consequences. Most dramatically, a failure to use a trade mark will result in its cancellation. Secondly, and more importantly, there is sometimes a danger that a decision *not to commercialise* is treated as a reason for ignoring questions of ownership - a potentially serious mistake.

Before considering these issues however, it may be worth dwelling on certain principles of commercialisation.

5.2 Principles of Commercialisation

In practice, decisions about whether to commercialise and, if so, the mode of commercialisation to be adopted may be determined by a range of factors. Nevertheless, there are basic principles that should be remembered when designing a commercialisation strategy.

5.2.1 Deciding whether commercialisation is appropriate

There is considerable pressure on organisations to commercialise their intellectual property, but thought always needs to be given to whether a research management strategy that places emphasis on commercialisation is appropriate for any given

organisation. Having a viable commercialisation strategy can impose its own costs. Most obviously, it may be necessary to employ additional staff to run the commercialisation policy. In addition it is sometimes claimed that an emphasis on commercialisation can impact negatively on the research culture of an organisation. Some publicly funded organisations have also decided that it may not be appropriate to commercialise research where this would impose additional costs on primary stakeholders. However, even if an organisation decides that commercialisation will only sometimes be appropriate it will still need to take steps to ensure that commercialisation will be *possible* in those cases. In addition, protection of intellectual property provides control over how it is used, even if the terms of use are that there will be no charge.

5.2.2 Ensuring that Commercialisation is Possible

Given that it is often impossible to predict in advance whether a particular research project will give rise to valuable intellectual property rights, even if an organisation decides that it will only pursue commercialisation on an *ad hoc* basis, research must be managed in such a way to ensure that it is capable of being protected in cases where this is deemed desirable.

Ensuring that rights are capable of being protected and commercialised by the organisation in question involves two key considerations: (1) the organisation must ensure that it owns the research output in question (2) the organisation must ensure that intellectual property rights are not inadvertently lost. In particular, in the case of potentially patentable inventions, procedures must be put in place to ensure that the opportunity to obtain a patent is not lost through prior publication or disclosure of the invention.

When thinking about prior publication or disclosure it is also important to understand the limits of the newly introduced 'grace period'. Some attention has been given to recent changes to the *Patents Act* which mean that an inventor will not automatically destroy the novelty of an invention by publishing or disclosing information about his or her invention before applying for a patent. Provided that the inventor files with IP Australia a complete application for a patent within 12 months of the date on which the invention was published or disclosed, the invention will not lack novelty. However, there are two key problems which mean that routine reliance on the grace period would be a mistake. First, it should be noted that many other countries do not have similar provisions (in

particular, there is no grace period under the European patent system) and hence any publication or disclosure of the invention may still destroy novelty in certain countries. Secondly, the grace period is only available in respect of information that was published or disclosed by or with the consent of the patentee after 1 April 2002.

Organisations that wish to pursue a commercialisation strategy should establish procedures that identify, as early as possible, research that may be suitable for commercialisation. This will include intellectual property from planned research (which should be identified at pre-project stage). Invariably, unexpected research results will arise after a project has started. As such, it is also important to have in place reporting mechanisms as well as mechanisms to monitor the progress of research throughout the duration of a project.

5.3 Modes of Commercialisation

While the mode of commercialisation will often have to be decided on a case-by-case basis, it is possible to identify some general issues that are likely to impact upon the preferred mode of commercialisation.

5.3.1 Assignment

An assignment is a transfer of ownership of intellectual property rights. As a result of an assignment, the assignee (that is, the person to whom the rights have been transferred) becomes the owner of the intellectual property and is free to deal with it accordingly. Assignment of intellectual property is analogous to selling a house and by so doing the seller has no further right or obligations in relation to that house.

One potential problem with an assignment is that it will result in the assignor losing the ability to control how the intellectual property is used and developed, and hence the assignor will be unable to prevent the intellectual property from being exploited in a manner prejudicial to the interests of its stakeholders. An assignment will therefore generally be the preferred option only where the assignor can be confident that the interests of its stakeholders will not be adversely affected, and where the financial risk is such that a commercial partner could not reasonably be expected to agree to anything less than an outright assignment. Further, the assignor will not have any rights to seek a new partner should the assignee fail to exploit the research. However, parties are free to

impose conditions in assignments as to reassignment in the event of certain circumstances (such as failure to exploit).

As noted earlier, with the exception of registered trade marks, an assignment must be in writing and signed by the parties in order to be effective. Certification trade marks can only be assigned with the authorisation of the Australian Competition and Consumer Commission (ACCC). Assignments of patents and PBR must be registered with IP Australia in order to take effect. In addition, the *Patents Act 1990* provides that a patent may be assigned for a place in, or part of, the patent area.

5.3.2 Exclusive licence

An exclusive licence authorises the licensee, to the exclusion of all other persons, including the person granting the licence, to exercise the rights which would otherwise be exercisable exclusively by the owner of the intellectual property. As such, an exclusive licence is in many respects similar to an assignment. The key difference between an assignment and an exclusive licence is one of control. An owner of intellectual property who wishes to permit another to exploit the intellectual property can retain better protection by giving an exclusive licence. This is because an exclusive licence only gives to the licensee permission to exploit the intellectual property. Unlike an assignment, a licensor who grants an exclusive licence to another retains legal ownership of, and title to, the intellectual property. In contrast, an assignment is understood as an outright sale that, generally speaking, brings the assignor's interest in the property to an end. There are, in addition, certain technical legal differences between an exclusive licence and an assignment that mean that the exclusive licensee's rights are less certain than those of an assignee, and can be defeated at the hands of a bona fide purchaser. Moreover, an exclusive licensee, unlike an assignee, may not always be able to grant a sub-licence or transfer the benefit of the licence to a third party.

There are no formal requirements in Australia for exclusive licences. An exclusive licensee of a patent or copyright can sue infringers on its own initiative, but must join the owner of the IP as a party to the litigation. In contrast, an action for infringement of a PBR may only be brought by the owner of the PBR.

In some cases, it may be appropriate for an IP owner to enter into an exclusive licence with a commercialising partner. Exclusive licences are generally attractive to commercial

partners and may be attractive because they make the process of monitoring exploitation much less complicated. Where an exclusive licence is granted, it would normally be expected that the commercialising partner would pay a royalty or dividend for the use of the intellectual property. In addition, the commercialising partner would be expected to market, distribute and service this technology on terms that will safeguard the interests of stakeholders.

Common provisions in exclusive licence agreements relate to:

- 'granting back' intellectual property rights to improvements of, or inventions arising from the use of, the licensed technology;
- obligations to obtain regulatory and quality approvals;
- the licensor agreeing not to challenge the validity of the licensed technology;
- keeping licensed know-how confidential;
- auditing rights;
- responsibilities to enforce the licensed intellectual property rights; and
- various warranties, indemnities and limitations on liability.

Normally, an exclusive licence will allow the owner of the intellectual property to reserve the right to bring the licence to an end should the partner cease exploiting the research.

5.3.3 Non-exclusive licence

In other cases an owner of IP will enter into a non-exclusive licence arrangement with the partner responsible for commercialisation. Under a non-exclusive licence, the licensee is granted the right to exploit the IP, but the licensor retains the rights to exploit the IP itself and to license other parties to do so. In general, the commercialising partner will pay a royalty, fee, or dividend in return for the right to use the intellectual property.

5.3.4 Equity Owner

Instead of assigning or licensing the intellectual property rights for an initial licence fee and a royalty payment, an IP owner may consider taking an equity share in a licensee company or start-up firm. The primary advantage of this approach is that it offers the IP

owner the possibility of maximising its revenue stream. It runs up against the problem, however, that it increases the IP owners' risk.

5.3.5 Partnerships

Another mode of commercialisation is through a partnership with another company or organisation. Partnerships are regulated by State and Territory legislation throughout Australia. A partnership is a legal relationship whereby two or more parties agree to carry on a business in common with a view to profit. A partnership may be created by a written or verbal agreement, or it may be inferred from a course of dealing adopted or agreed upon by all the partners. The receipt by a person of a share in the net profits of a business will generally be prima facie evidence of the existence of a partnership, especially if each member bears a share of the losses. Unlike proprietary or limited liability companies, partnerships do not create a separate legal entity apart from its members, and the partners own the assets of the partnership jointly.

One important consequence of the establishment of a partnership is it creates what is known as a 'fiduciary' relationship between each of the partners. Fiduciary relationships entail a number of different obligations, the most important being that each of the partners must act in the best interests of the partnership and not for their own interest. Where a conflict between the interests of the partnership and a partner's personal interest arises, the law requires the affected partner to make full disclosure of the conflict to the other partners. The problem with partnership arrangements is that in some States and Territories the partners have unlimited legal liability and, in practice, the running of a partnership formed from two or more legal entities (ie companies) can be extremely complex. Moreover, partners are jointly and severally liable for debts incurred by the partnership. A partnership arrangement is therefore unlikely to be an attractive mechanism of commercialisation of IP.

However, it is important to understand that there are situations in which the law will imply a partnership arrangement. The factors that will lead a court to imply a partnership are complex and are therefore not capable of being easily summarised, but it is clear that an agreement to share ownership of property or revenue streams from exploitation of property (including intellectual property) will not in and of itself be sufficient.

One area in which the law of partnerships is directly relevant is in relation to unincorporated CRCs. Such CRCs could be deemed to be partnerships at law and hence legal rules governing ownership of partnership property, authority to negotiate on behalf of the partnership and what happens to partnership property on dissolution are important.

5.3.6 Closed-Loop Arrangements and Compulsory Licences

It is increasingly common for varieties protected by plant breeder's rights to be exploited via 'closed-loop' arrangements. 'Closed-loop' is an industry term rather than a legal category of contract and the expression can be used to describe a wide range of contractual arrangements. Typically, this type of arrangement exists where one party imposes restrictions on another party's freedom to choose with whom, in what, or where they deal. Frequently, a closed-loop contract will require a grower who purchases a protected variety from the PBR owner to sell harvested materials or products obtained from harvested materials either back to the PBR owner, or to a specified collection agency. The owner may also stipulate that the grower must propagate the protected variety exclusively (ie no other varieties can be propagated on the grower's property). In this way, the owner/licensee can control the production, distribution and marketing of the protected variety and products derived from it.

It is important to appreciate that the use of closed-loop arrangements may have a number of unintended consequences. One possible consequence of using a closed-loop arrangement is that it may leave the PBR owner vulnerable to a claim that they are not providing reasonable public access to the protected variety. Section 19 of the *Plant Breeder's Rights Act* imposes an obligation on the owner of a protected variety to make propagating material (as opposed to the harvested product) of 'reasonable quality' available to the public at 'reasonable prices' and in 'sufficient quantities' to meet demand. Where this does not occur, a grower may seek a compulsory licence over the variety from the Plant Breeder's Rights Office.

A compulsory licence is different from other types of licence insofar as it is imposed on the owner of the PBR by statute (as opposed to other licences that are voluntarily entered into). For a compulsory licence to be granted, a party whose interests are affected must make a written application to the PBR Office. The applicant must show that within two years of the rights being granted, the PBR owner has not taken all reasonable steps to

ensure reasonable public access to the propagating material of that plant variety. The owner is given the opportunity to refute the claims and to demonstrate that reasonable public access is being provided before a compulsory licence is granted. If the PBR Office is not satisfied that reasonable public access to propagating material of the protected variety is being provided, it can license a person to produce and sell propagating material of the protected variety for such period of time and on such terms and conditions (including reasonable remuneration to the PBR owner) as it considers would be granted by the PBR owner in the 'normal course of business'. The compulsory licence might also allow growers to sell saved propagating material to other growers.

Closed-loop arrangements may not contravene this clause: the owner or licensee of a protected variety may well ensure that demand for the variety is met, notwithstanding that each grower that buys the propagating material is subject to the closed-loop arrangement. If other contractual conditions are also put on, but on balance do not negate the argument that there are sufficient quantities available at reasonable price, then such closed-loop contracts would not provide grounds for the grant of a compulsory licence. However, the owner of a protected variety may be vulnerable to an application for a compulsory licence where it denies a grower access to propagating material because the grower is unwilling to accept certain terms of the closed-loop contract, for example the contract requires the grower to pay a royalty on the harvested material (rather than the propagating material).

Another possible consequence of using a closed-loop arrangement is that the contract may contravene the *Trade Practices Act 1974* (Cth). Of particular importance are sections 45 and 47 of the *Trade Practices Act*. Section 45 prohibits (among other things) the making or giving effect to an exclusionary provision in a contract, arrangement or understanding. An exclusionary provision is one made between competitors which has the purpose of preventing, restricting or limiting the supply or acquisition of goods or services to or from particular persons or classes of persons either altogether or in particular circumstances or on particular conditions. Section 47 also prohibits corporations from engaging, in relation to goods or services, in the practice of exclusive dealing, such as 'third-line forcing'. Third-line forcing occurs when a corporation sells goods or services or gives a discount, but only on condition that the purchaser acquires other goods or services from a third person.

Unlike patents, copyright works and registered trade marks, licences relating to plant breeder's rights are not exempted from these provisions. However, the Australian Competition and Consumer Commission (ACCC) can authorise an exclusionary provision or conduct that amounts to exclusive dealing. An application for authorisation must be made by a party to an exclusionary provision or a person engaging in exclusive conduct. The applicant must satisfy the ACCC that there is public benefit arising from the conduct and that the public benefit outweighs any detriment, including any caused by a lessening of competition. If granted, authorisation provides protection from action by the ACCC or any other party for potential breaches of the *Trade Practices Act*.

An application for authorisation of a closed-loop arrangement was recently made by the Australian Nurserymen's Fruit Improvement Co. Ltd. (ANFIC). ANFIC is a company comprised of 12 members each of which are commercial plant nurseries. These nurseries supply propagating material to fruit growers for commercial production. ANFIC proposes to establish a closed-loop arrangement between its 12 members and various participants in the supply chain, including growers and wholesalers, to undertake joint marketing and production of high quality fruit varieties (referred to by ANFIC as 'exceptional fruit'). The proposed arrangement would allow ANFIC's members to standardise their royalty collections and determine the supply of the nominated fruit varieties. ANFIC's application submitted that the proposed arrangement would provide a number of public benefits, including providing a co-ordinated approach to marketing and, through changes to royalty arrangements and income streams to nurseries, continued improvements in plant varieties.

On 23 March 2006 the ACCC issued a draft determination rejecting ANFIC's application. The ACCC took the view that the proposed public benefits are unlikely to achieve any greater benefits than those that are already provided for by the *Plant Breeder's Rights Act*. The ACCC did recognise, however, that supply chain agreements can provide for improvements in intellectual property protection and in the promotion of appropriate investment incentives. The ACCC also expressed concern that closed-loop arrangements may result in a less efficient outcome for society, for example, less choice and higher prices. However, the ACCC did indicate that closed-loop arrangements that are smaller in size and scope may provide sufficient public benefit to outweigh these detriments.

The ACCC's decision confirms that parties to closed-loop contracts should always seek legal advice before entering into them to avoid potentially incurring liability for breach of the *Trade Practices Act*.

5.4 Restrictions on Contractual Freedom 1: Common Law Rules

Generally speaking, common law systems, such as Australia and the United Kingdom, are reluctant to refuse to enforce contractual obligations. There are, however, a small number of legal principles that will allow a court to set aside a contract, and there may be circumstances in which these principles will come into play. The most important of these principles are the doctrines of 'restraint of trade', 'undue influence', and 'economic duress'.

5.4.1 Restraint of Trade

One legal doctrine that has been employed to protect creators from disadvantageous contractual arrangements is the doctrine of 'restraint of trade'. This doctrine reflects a general policy of the common law that a person should be freely able to practise his or her trade. The general rule is that contracts which restrict this right are contrary to public policy and are *prima facie void*. Despite this, contracts of employment frequently contain terms which seek to restrict employees from practising their trade within a certain area and/or for a certain period of time after their employment has come to an end, and the courts may uphold such terms provided that they are justified. Restraints of trade are only justified where the restriction is reasonably required to protect both the legitimate interests of the person seeking to rely on the clause and the interests of the public. A good example of where the restraint of trade doctrine might come into play is where a researcher is prevented by a clause of his or her employment contract from working in the same or a similar field after their period of employment comes to an end.

It is often difficult to say in advance when, precisely, a clause will be deemed to be invalid. Much depends on the nature of the industry involved and the seniority of the employee. Generally speaking, however, a clause will be valid if it restricts a researcher from reutilising specific trade secrets or 'know how' but will be invalid if it seeks to prevent a researcher from using his or her 'general skill and knowledge'. In New South Wales, the *Restraints of Trade Act 1976* enables courts to 'read down' or vary the terms of an illegal restraint of trade clause to make it reasonable. However, courts in other

jurisdictions have no such powers and a restraint of trade clause will be unenforceable whenever it is unreasonable.

It is also important to appreciate the relevance of the doctrine of restraint of trade to commercial contracts, such as licences of intellectual property or technology transfer agreements. Although the courts have on occasion sought to uphold standards of commercial morality, a term of a contract which restricts a party from doing certain acts which other persons not party to the contract can lawfully do, is likely to be struck down as contrary to the doctrine of restraint of trade. For example, a term of a licence to propagate a protected plant variety which requires a grower to continue to pay royalties to the PBR owner after the term of the PBR for the variety has expired may be regarded as an unreasonable restraint of trade.

5.4.2 Undue Influence

If an unfavourable bargain is the result of the exercise of undue influence placed upon the party adversely affected the court may set the bargain aside. An extreme example would be where a creator has assigned rights because of threats made by the assignee. However, the court's power to interfere extends beyond such extremes to all situations where a "person in a position of domination has used that position to obtain unfair advantage for himself, and so cause injury to the person relying on his authority or aid".

Two elements must therefore be present for the principle of undue influence to come into play: first, there must be a relationship in which one person has influence over another; and secondly, there must be a manifestly unfavourable transaction resulting from the exercise of that influence. The question is not whether the party seeking relief understood the transaction but whether it was the result of a free exercise of his or her will. If undue influence exists, any contract is 'voidable', that is, able to be rescinded by the party subjected to the undue influence or liable to be set aside by the court, and any rights assigned may be restored to the creator. Undue influence might be relevant if, for example, a postgraduate student were persuaded by a senior researcher to assign rights to, say, a research organisation without provision being made for adequate financial remuneration – contracts entered by young and inexperienced creators without independent legal advice are particularly vulnerable. It seems, however, that since a contract entered into as a result of undue influence is voidable (as opposed to being automatically void), *bona fide* contractual dealings before the contract is avoided will

remain binding. This should protect an organisation that, for example, deals with a CRC in good faith, not realising that the research organisation has only acquired title as a result of the exercise of undue influence.

5.4.3 Economic Duress

A third avenue for some creators might be to claim that a contract has been made in circumstances of economic duress. One scenario where this might occur is where a would-be owner attempts to force an assignment of rights after the work, invention etc has been created and supplied and where the assignment operates as a condition for being paid. Although it will always be a matter of construction, if:

- the original agreement is merely one of supply in return for payment;
- the would-be owner is in effect demanding the assignment of rights as an additional condition by threatening not to pay in accordance with the terms of the initial agreement; and
- the effect of the threat is to induce the assignment,

A court may find there has been an exercise of economic duress and/or lack of consideration for the contractual variation, such that the creator may be able to get the transfer set aside. Much the same principles would apply if, say, a university attempted to force a PhD student to assign his or her rights after creation as a condition of continued supervision etc, or a funding body attempted to force a PhD student to assign rights as a condition of continuing to provide an agreed scholarship. In short, it will not always be possible to correct what one party considers to be a contractual defect by that party using its financial power to force a transfer of ownership.

5.4.4 Contractual Interpretation

A fourth avenue which creators may attempt to use to avoid contractual arrangements is to argue that the contract should be interpreted in a restrictive way. Strictly speaking, of course, this is not a method of 'setting aside a contract', but as a practical matter this is a method by which creators may be able to avoid certain obligations. Such attempts are perhaps most likely to be successful where there is an attempt to exploit or disseminate intellectual property rights using new technologies. For example, a contract signed in 1919 by which the author Sir James Barrie granted Famous Players Film Co "the sole and

exclusive licence to produce [Peter Pan] in cinematograph or moving picture films” was held not to cover the making of cinematographic films which had soundtracks (“talkies”). The parties could not have anticipated use in relation to films with soundtracks since the technology was not available until 1923 and not commercially usable until 1927. It might well be possible for an author of a copyright work to raise a similar argument if an assignee of 'reproduction' rights in a copyright work wishes to make a work available online and the contract was entered into prior to use of the Internet becoming widespread.

More generally it should be remembered that according to Australian law, contracts are to be interpreted in the same way as any serious utterance would be interpreted in ordinary life: by ascertaining the meaning which the words would convey to a reasonable person having all the background knowledge that would reasonably be available to the parties at the time of the contract. The language of the document is understood against the background, and while that background will usually require the words be understood as bearing their ordinary meaning, the background may be such as to require that words be read in a different way or even ignored.

In addition, in cases of ambiguity, courts in Australia will sometimes apply the so-called *contra proferentem* rule. The basis of this rule “is that a person who puts forward the wording of a proposed agreement may be assumed to have looked after his own interests, so that if the words leave room for doubt about whether he is intended to have a particular benefit, there is reason to suppose that he is not”. This so-called rule is often very weak, but it can have some force as part of an overall picture. That is particularly the case where one party is a large organisation with a knowledge of the market and financial ability to employ and obtain the best legal and other advice, and the other party is a small individual with very limited funds and knowledge. However, its *limitations* must be *emphasised*: it only applies where conventional rules of interpretation give rise to ambiguity, that is, where the document is open to more than one interpretation.

5.4.5 Implied terms

There are also situations where courts will imply terms into a contract. There are a number of situations where this might occur, such as:

- where an unforeseen problem arises on which the express terms of the contract are silent, and one party argues that a term should be implied in order to resolve the problem;
- where custom or trade dictates that certain terms should be included; and
- due to the previous course of dealings between the parties.

The courts have stated that terms will be implied where these are "necessary for the reasonable or effective operation of the contract in the circumstances of the case". The five key criteria to be applied are that the term must:

- be reasonable and equitable;
- be necessary to give business efficacy to the contract so that no term will be implied if the contract is effective without it;
- be so obvious that "it goes without saying";
- be capable of clear expression; and
- not contradict any express term of the contract.

Further, in particular industries, courts are prepared to hold that by reason of custom or usage, there are certain terms that operate in trade contracts of which all parties are expected to know.

5.5 Restrictions on Contractual Freedom 2: Statutory Protection for Creators

It was seen in the first section that in addition to the economic aspects of intellectual property regimes, some intellectual property systems also provide protection for the creators of the work, invention etc. Such protection is often specifically intended to protect creators against employers and other 'first' owners of intellectual property rights. As has been noted, Australia has been slow to recognise such rights, but the position is beginning to change.

5.5.1 Copyright and Moral Rights

In addition to the economic rights created by the *Copyright Act* (which as we have seen can be transferred), Australian law also gives creators of certain works 'moral rights'.

Moral rights (the term is derived from the French *droit moral*) are intended to protect an author's non-pecuniary or non-economic interests. Such rights have been included in the provisions of the leading international convention on copyright, The Berne Convention, since its 1928 revision. However, it is only recently that such rights have been granted in Australia. It is important to emphasise that such rights continue to be exercisable by the author of the work even after copyright has been assigned and that moral rights themselves are not transferable other than on the author's death.

Australian law grants three moral rights:

- 1 The right to be named as the author when a work is copied or communicated to the public (the right of attribution). Any attribution must be clear and reasonably prominent;
- 2 The right to prevent false attribution, that is, the right to prevent attribution as author in relation to a work that the author did not create. Significantly, the right against false attribution will also arise where a work that has been substantially altered is dealt with as the unaltered work of an author - in such a case it needs to be made clear that the work has been changed; and
- 3 The right to prevent derogatory treatment of the work (the right of integrity). This right applies where a work has been altered in such a way as to prejudice the author's honour or reputation. Because moral rights are a recent addition to Australian law, as yet we have little guidance on when an alteration will amount to a derogatory treatment.

Although moral rights cannot be assigned they can be 'waived'. This means that authors can agree not to enforce them. Under Australian law such waivers can only be in relation to specific actions – a general waiver will not be enforceable.

Moral rights might be particularly important in a case where an organisation wishes to amalgamate a number of research reports and present this as the work of a group of researchers. In such a case the only safe course of action is to seek specific approval from all of the researchers involved.

As a final point it should be noted that other countries, particularly civil law countries such as France and Germany, provide authors with a greater range of much stronger moral rights.

5.5.2 Protection for Inventors

Australian law provides very little protection for inventors as creators. The only right enjoyed by inventors is the right to be named as such on the patent documentation, a right that is also found in most other countries. In contrast, certain other countries provide inventors with much greater protection. In particular, some countries provide inventors with the right to share in profits. Such a right is, for example, to be found under UK law, although the statutory right in question has been given a restrictive interpretation by the courts. Perhaps the most comprehensive system of protection for inventors is to be found under German law which includes, for example, a provision that allows an employee to take title of an invention that is not being exploited by his or her employer.

While protection for inventors overseas should cause few difficulties in the vast majority of cases, when dealing with exceptionally valuable inventions, for which there is a worldwide market, the existence of such rights must be remembered.

5.6 Restrictions on Contractual Freedom 3: Competition Law

5.6.1 Overview

The restrictions on contractual freedom already considered focus primarily on the relationship between the creator of intellectual property and the owner of the intellectual property. There are, however, restrictions that operate as between the owner of intellectual property and the world at large. These restrictions are generally imposed by laws against anti-competitive conduct.

As has been seen, there is some tension between competition law and intellectual property laws. IP laws grant limited monopolies in certain subject matter, in particular giving owners of IP rights exclusive rights to exploit their IP or allow people or organisations of their choosing to exploit the IP. Competition law, on the other hand, aims to prevent conduct that restricts competition, such as the ability of one party to restrict others from trading in a particular market. The most controversial area is when an

owner of IP rights refuses to licence its technology, particular when that technology is highly unusual and may open up new product markets.

To understand this tension, and how the Commonwealth has attempted to resolve it, regard must be had to Part IV of the *Trade Practices Act 1974* (Cth). This Act prohibits certain anti-competitive conduct. The most important prohibitions for present purposes are:

- s 45: entering into a contract, arrangement or understanding that has the purpose or likely effect of substantially lessening competition in the relevant market;
- s 45A: entering into a contract, arrangement or understanding that has the purpose or likely effect of price fixing, without there needing to be a substantial lessening of competition in the relevant market (nb – for joint ventures for the supply of services, there must be a substantial lessening of competition);
- s 46: misuse of market power: the prohibition applies if an organisation has a substantial degree of power in a market and uses that power for the purpose of eliminating or damaging a competitor, preventing the entry of a person into the market, or preventing any person from competing against the organisation;
- s 47: exclusive dealing. This captures a range of conduct, including:
 - the supply of goods or services on the basis that the recipient will not acquire similar goods from other suppliers; or
 - the refusal to supply goods or services on the basis that the recipient has acquired similar goods from other suppliers,

where the effect of the arrangement is substantially to lessen competition.

Penalties for contravention of Part IV provisions are severe.

However, the Act also provides an exception to much of this conduct in section 51(3) in recognition of the exclusive rights granted to owners of IP. This provision states as that a person will not contravene sections 45, 45A and 47 in one of three situations:

- a. imposing or giving effect to a condition in any of the following:
 - a licence granted by the proprietor, licensee, owner of or applicant for a patent;

- a licence granted by the proprietor, licensee or owner of copyright;
- an assignment of a patent or the right to apply for a patent; or
- an assignment of copyright,

to the extent that the condition relates to:

- the invention to which the patent or application for a patent relates or articles made by the use of that invention; or
 - the work or other subject matter in which the copyright subsists;
- b. including, in a contract, arrangement or understanding authorising the use of a certification trade mark, a provision in accordance with rules applicable under the *Trade Marks Act*; and
- c. including, in a contract, arrangement or understanding between the registered proprietor of a trade mark (other than a certification trade mark) and a person registered as a registered user of that trade mark, a provision to the extent that the provision relates to the kinds, qualities or standards of goods bearing the mark that may be produced or supplied.

5.6.2 Examples of provisions falling within section 51(3)

The chief problem with section 51(3) is that it is not clear what sort of arrangements concerning IP licensing will fall within the exception. In particular, it is unclear whether the term 'relates to' in (a) and (c) is to be interpreted broadly or narrowly. It has been suggested that for patents and copyright, the owner of the IP has the ability in licence agreements or assignments to exercise control over price, quantity, quality, customers and territory. Some examples of provisions in commercialisation contracts that are likely to fall within the exception in section 51(3) are:

- mutual cross-licensing agreements between IP owners;
- licensing of 'background IP'; and
- exclusive licensing of IP owned by a number of enterprises to an incorporated entity responsible for commercialising the IP.

In each case, it is likely that the relevant licence provisions would 'relate to' the patent or copyright material in question. In these cases, the provisions will not contravene the

Trade Practices Act, even if they result in a substantial lessening of competition in the relevant market.

5.6.3 Examples of provisions falling outside section 51(3)

Other provisions in IP licence agreements may not 'relate to' the subject matter in which the IP exists, and thus fall outside the scope of section 51(3). Some examples are:

- Certain 'tying' provisions imposed by the IP owner in a licence agreement – for example, requiring a licensee to use with the licensed product another of the IP owner's products or a third party's products. For example, an obligation to purchase in conjunction with the sale of a GM herbicide-resistant crop a particular brand of herbicide would be likely to fall foul of competition law. Even here, however, there are difficult cases at the margins - it is not easy, for example, to know how to treat provisions that make a warranty conditional on the use of a particular 'related' product;
- A provision that seeks to prevent the licensee from acquiring technology that competes with the licensed product; and
- A restriction on the licensee developing its own technology.

Other provisions may not fall within the section 51(3) exception because of limitations in the wording of section 51(3). As mentioned earlier, the provision does not cover all forms of IP. In particular, it does not cover Plant Breeder's Rights or unregistered trade marks. Licence agreements relating to such subject matter are therefore subject to the prohibitions in sections 45, 45A and 47. Further, section 51(3) does not cover future IP rights. Thus, while the licensing of background IP will likely fall within the exception, the licensing of future IP will not. Similarly, licence agreements often contain 'grant back clauses', requiring the licensee to transfer ownership of any new developments of the licensed technology to the licensor. These provisions will be subject to sections 45, 45A and 47.

This is not to say that commercialisation agreements with provisions not covered by section 51(3) will raise competition issues. Section 45 and parts of section 47 both require that the purpose or effect of the agreement is that there be a substantial lessening of competition. This requires an assessment of a range of factors, including how the relevant 'market' is to be defined, the market share and market power of the

owner of the IP, the presence or absence of barriers to entry into the market, the extent to which the arrangement keeps competitors out of the market, and the length of time over which the restriction operates.

5.6.4 Refusal to licence

An important issue that is not resolved by section 51(3) is the extent to which an owner of IP (other than PBR) may refuse to give access to that IP. The most common example is a refusal to license. In this situation, the question will be whether the refusal to do so constitutes a misuse of market power, in contravention to section 46 of the *Trade Practices Act*. The key issue here is the extent to which IP rights themselves confer market power on the owners of the IP. The present position in Australia is that IP rights alone do not do so, in part because the relevant market will usually be broader than the market for the invention or copyright material the subject of the IP rights. Another reason why refusals to licence IP will seldom be regarded as a misuse of market power is that a corporation will only be liable for misuse of market power where that corporation has 'taken advantage' of its market power. This requirement has been interpreted strictly: where an organisation enjoys a natural monopoly (for example, through technological factors or by legislation) and decides to refuse supply to a particular person, the courts have held that the corporation does not necessarily take advantage of its market power.

In respect of PBR, as noted above section 19 of the *Plant Breeder's Rights Act* requires owners of PBR to provide reasonable public access to the protected variety – that is, at reasonable prices and in sufficient quantities to meet public demand. If the owner fails to do so, the Secretary of IP Australia may on the application of a person whose interests are affected by the failure to provide reasonable public access to the protected variety license that person to exploit the PBR on such terms and for such a period of time that the Secretary considers would be granted by the owner of the PBR in the normal course of business.

5.6.5 The role of the Australian Competition and Consumer Commission (ACCC)

The ACCC is chiefly responsible for taking action to enforce contraventions of Part IV of the *Trade Practices Act*. It can also, on the application of parties, authorise certain conduct that would otherwise be in breach of sections 45, 45A and 47.

The ACCC has been asked by the Federal Government to issue guidelines that outline the application of Part IV to intellectual property. The Federal Government has suggested that these guidelines should provide sufficient direction to owners of IP rights to clarify the types of provisions likely to result in a substantial lessening of competition.

5.7 Decisions Not to Exploit or Commercialise: Impact on Intellectual Property

Even if it is decided that a particular research output should not be commercialised, thought should still be given to intellectual property-related issues. One issue that needs to be considered is what impact a decision not to exploit will have on any intellectual property rights that are already owned. Non-exploitation can have important legal consequences. For example, a trade mark becomes liable to be revoked where there has been no use of the mark for a period of three years (or five years after first grant).

While patents cannot be revoked for non-use in the same way, some patent systems allow for compulsory licences to be obtained in situations where the reasonable requirements of the public are not being satisfied by the owner of a patent or where demand for the patented subject matter is not being met on reasonable terms (for instance, such provisions exist in both Australia and in Europe).

A second issue that should be considered is what steps should be taken in the event a decision not to commercialise is taken. In particular, where the research output is of a type or in a field that might allow for the grant of a patent, thought should be given to placing research outputs in the public domain in such a way that fully discloses the research. This will prevent third parties from procuring a monopoly over any substantially identical outcome.

A further consideration is that a decision not to commercialise can lead to inattentiveness towards issues of ownership which can be a problem if another party then decides it wishes to monopolise research outputs.

6

Enforcing intellectual property rights and related issues

6.1 Overview of Enforcement

This section covers two key issues, namely, the steps that can be taken to ensure that Intellectual Property Registers are accurate, and the ways in which intellectual property rights can be enforced. We begin by considering issues relating to enforcement. This involves consideration of a number of related issues:

- Firstly, thought needs to be given to the methods by which intellectual property rights can be enforced. It is widely accepted that litigation should normally only be used as a last resort. We therefore begin by considering what other steps can be taken to enforce intellectual property rights. This in turn involves considering the benefits and pitfalls of non-judicial forms of dispute resolution and the practical steps that can be taken in order to bring pressure on an individual or organisation to comply with intellectual property rights;
- Secondly, deciding whether to pursue an action for infringement is ultimately a commercial decision, but there are a number of factors that ought to inform such a decision. Most obviously, consideration needs to be given to the likelihood of success and the cost of proceeding. In addition, thought should be given to what results can be expected from a successful action, other risks that attach to intellectual property litigation (in particular, that in the case of registered forms of intellectual property the defendant will normally attempt to have the right in question revoked), and the risks associated with not bringing an action for infringement (which are more significant than is sometimes appreciated); and
- Finally, an understanding of the processes by which rights can be enforced, including an understanding of what bringing an action for infringement will entail, can increase confidence when dealing with potential infringers and this can in turn make disputes less likely.

6.2 Methods of Resolving Disputes

6.2.1 Direct Contact

Given the potential costs associated with litigation a logical first step in cases where infringement is suspected might seem to be to contact the suspected infringer in order to obtain further details and to attempt to resolve the matter directly. There are, however, good reasons for avoiding contact of this kind. First, direct contact between the parties can often cause friction and lead the parties to harden their positions, thus making a settlement (such as an agreement to pay royalties) harder to achieve. Secondly, there are statutory provisions that prohibit the issuing of groundless threats in relation to intellectual property rights. The *Trade Marks Act*, *Patents Act* and *Copyright Act* each make provision for groundless threats. Under each Act, if a person threatens to commence proceedings for infringement of the registered trade mark, patent or copyright against another person, the person (or persons) aggrieved by the threat is entitled to apply to a court for an injunction against the continuance of the threats. In addition, a court that is satisfied that the threats are unjustified can order the person making the threat to pay damages to the aggrieved party for any damage sustained by the applicant as a result of the threats. Thus, although direct communication with a suspected infringer is usually designed to forestall or avert legal proceedings, in certain situations this may actually result in the opposite of the desired effect.

These provisions were introduced because it was recognised that the cost and burden of intellectual property litigation means that the mere threat of litigation has the potential to act as a potent commercial weapon. Perhaps the most important thing to note about the provisions relating to threats is that the mere fact that a threat was made in the honest belief that an infringement was taking place does not provide a defence.

The courts have interpreted what constitutes a threat liberally. There is no need for the IP owner to state explicitly that it will take action. For example, showing a retailer a copy of a provisional patent and intimating that this would give the owner enforceable rights once the full patent was granted and requesting that the retailer withdraw its goods from sale was held to constitute a threat. On the other hand, correspondence which simply draws the existence of the intellectual property rights to the addressee together with an offer of a licence is unlikely to be regarded as an unjustified threat.

However, the courts will pay close attention to the initial impression the communication would make on a reasonable addressee. Organisations which suspect an infringement would therefore be well advised to seek legal advice before making contact with the suspected infringer. IP owners should also be aware that while legal practitioners should know what constitutes a threat and what does not, a threatening letter sent by a legal practitioner does not protect the IP owner from an action for groundless threats of legal proceedings (although the owner might well have a legal remedy against a legal practitioner that exposed it to this form of liability suing for professional negligence is always fraught with difficulty).

In contrast with registrable forms of intellectual property, there are no statutory provisions that protect against unjustified threats to sue in relation to confidential information or unregistered trade marks. A person making an allegation of infringement must still be cautious, however, since a person aggrieved by a threat may be able to bring an action for injurious falsehood (part of the law of defamation).

6.2.2 Extrajudicial Methods of Resolving Disputes

There are a number of methods of dispute resolution that do not involve litigation. The two most relevant are arbitration and mediation. It is important to emphasise that although the terms 'arbitration' and 'mediation' are often used interchangeably, they are fundamentally different processes.

(a) Arbitration

Arbitration is in many respects very similar to litigation. It is a process whereby a dispute between parties is referred to be determined by an accredited arbitrator, rather than a court of law. It is a highly formal process, regulated throughout Australia by uniform legislation. Parties to an arbitration must present evidence and argue their cases before the arbitrator, and the arbitrator must decide the dispute in a judicial manner, that is, by observing the ordinary rules of procedural fairness and evidence. The arbitrator's decision is called an 'award' and is binding on the parties to the arbitration.

Parties usually agree, either in advance or once a dispute has arisen, to refer disputes to arbitration. Care must be taken in drafting arbitration agreements or clauses to ensure that they reflect the desires of the parties – many licence agreements contain clauses

requiring the parties to submit to arbitration in the event of a dispute, whereas the parties might wish only to mediate their disputes (see discussion below).

The arbitration process is often set out in detail in a licence agreement. Generally speaking, in the event of a dispute, one party sends a notice of dispute to the other. If the dispute is not resolved, the parties will then appoint an arbitrator (or if they cannot agree on who should be appointed to arbitrate the dispute, an organisation such as the Australian Commercial Disputes Centre or the Institute of Arbitrators and Mediators Australia).

The parties then attend a Preliminary Conference with the arbitrator, in which the arbitration process is explained and issues such as fees and time limits for the submission of evidence are discussed. From this stage, the arbitration process closely resembles litigation: one party submits its Points of Claim, and the other party responds with its Points of Defence; both parties support their positions by written evidence; and, the parties then attend the Hearing where parties may give oral evidence or rely on written evidence. The arbitrator then makes the award, and provides reasons for his/her decision. An award may be enforced by the Court in the same manner as a judgment of the Court. The parties have the right to appeal the award to a Court only on a question of law – as with Court judgments there is generally no right of appeal in relation to a decision about a disputed question of fact.

While the arbitration process is less formal than Court proceedings, given that the parties can choose the arbitrator and that the arbitrator has greater flexibility in the manner of conducting the arbitration, it does have limitations for IP owners. The arbitration process is slow, and can be delayed by an unwilling participant at various stages. An arbitrator does not have the same degree of power as a judge, and matters such as time limits for the submission of evidence can therefore be abused. Further, it is often very difficult to abandon arbitration proceedings. If an IP owner attempts to commence Court proceedings in respect of a dispute that the parties have agreed to submit to arbitration, the other party can ask the Court to stay these proceedings (which is usually granted). While the arbitration process is less expensive than litigation, parties are required to go to significant expense in gathering evidence and attending the Hearing, and since arbitral awards are frequently appealed, the arbitration process may ultimately be very costly.

(b) Mediation

A second, perhaps preferable, method of resolving disputes is through mediation. This is an informal process whereby the parties agree to meet and discuss their concerns before a mediator (who is either a party accredited by a professional body or merely a private party holding him or herself out as having mediation experience). The mediator is neutral and impartial, and usually has practical experience in or knowledge about the particular industry in which the dispute arises. He or she has no power to make a decision that binds the parties or to make a determination on the merits of the parties' dispute. Rather, the mediator's role is to isolate issues and facilitate discussion between the parties so that they can resolve the dispute themselves.

Mediation is generally private, and mediators are bound by obligations of confidentiality. Further, negotiations in a mediation are generally "without prejudice" to the positions that the parties have taken or may take in pending or future court proceedings. Parties are therefore encouraged to speak and negotiate frankly. Unlike court proceedings, mediation can generally be arranged quickly, for however long and wherever the parties choose, and the major expense to the parties is the mediator's fee.

Parties can agree contractually that in the event of a dispute arising between them, they will follow certain procedures, including agreeing to submit to mediation. However, as with some arbitration clauses, the enforceability of some mediation clauses is still uncertain and care needs to be taken in their drafting. Alternatively, the courts have the power to refer proceedings to mediation with the parties' consent. Mediation is particularly useful in the IP context if the parties are in an ongoing relationship, for example, as a licensor and a licensee of IP. Often, disputes between such parties relate to the interpretation of terms of the IP licence agreement, which may be more easily resolved through discussion rather than litigation, particularly where the parties have to maintain a continuing working relationship.

6.2.3 Self Help Remedies

Another alternative to bringing legal action can be to use a self-help remedy. Such remedies fall into two categories. First, provision is made in the Copyright and Trade

Mark Acts for an owner to notify the Chief Executive Officer of Customs in order to arrange for infringing items that are being imported to be seized. The legislation makes detailed provision as regards the procedure to be followed and customs may insist that the owner deposit a sum of money in order to reimburse the Commonwealth for expenses incurred as a result of the seizure. It should be noted that in Australia there is not a more general right to seize infringing articles at the point of sale in as is found in the legislation of certain other countries – provisions that are designed to deal with market traders. Self-help remedies for copyright and trade mark infringement of this first type are likely to be important only in rare circumstances.

6.3 Bringing an Action: Procedure, Costs and Risks

6.3.1 Who May Sue

In relation to registrable forms of intellectual property, proceedings for infringement may be brought by the registered owner of the IP (ie the original owner of the IP or a registered assignee), or by a person to whom an exclusive licence has been granted. As discussed above in section 5.3, an “exclusive licence” is a licence that authorises the licensee to the exclusion of all other persons, including the grantor of the licence, to exercise a right which would otherwise be exercisable exclusively by the owner of the IP. In some cases, infringement may give rise to concurrent rights of action by the owner of the IP and their exclusive licensee. An exclusive licensee of a patent or copyright can sue infringers on its own initiative, but must join the owner of the patent or copyright as a party to the litigation. An action for infringement of a PBR may only be brought by the owner of the PBR.

6.3.2 Liability for Infringement: General

Generally speaking, intellectual property rights are infringed by any person who, without the authorisation of the owner of the IP, does, or authorises another person to do, any of the exclusive rights conferred upon the owner of the IP. There are circumstances in which ascertaining whether a particular act falls within one of the exclusive rights of the owner can be a complex matter. Generally speaking, however:

- Plant breeder's rights are infringed when a person produces, reproduces or sells, imports or exports, propagating material of the protected variety, or where the

person uses the name of a registered variety in relation to any other plant variety in the same plant class or a plant of any other variety of the same plant class;

- Patent infringement occurs when a person “exploits” the invention, for example, by making, using or selling a patented product, or by using a patented process;
- Trade marks will be infringed if the defendant affixes a registered or unregistered mark to goods, or uses a registered or unregistered mark in relation to services or in advertisements, business letters etc;
- Copyright will be infringed if the owner copies or communicates to the public a substantial part of the work (a low threshold), except in cases where the defendant can bring itself within one of a number of specific exceptions (such as fair dealing for the purposes of research or private study); and
- An action for breach of confidence (including misuse of trade secrets) will lie where information that is “secret” is communicated to a third party without the consent of the person with whom the information originated or disclosed it.

6.3.3 Liability for Infringement: Employers

It is important to emphasise that the general rule that an employer will be vicariously liable when an employee commits a wrongful act in the course of their employment applies to infringement of intellectual property rights. It would therefore be normal to bring an action against the organisation concerned, rather than against particular individuals, but there are exceptions to this.

6.3.4 Time Limits

Delay in bringing proceedings may lead to an action for infringement being 'barred', either under statutory provisions or on equitable principles. For example, an action for infringement of copyright must be commenced within six years of the infringement taking place. Similarly, in the case of patents the action must commence within six years of the infringement taking place or three years from when the patent was granted - whichever period ends later. Once begun within the requisite period, however, proceedings will only be struck out for want of prosecution if there is real prejudice to the defendant, as well as inordinate delay.

6.3.5 Obtaining Legal Representation

IP litigation is highly specialised, and care should be taken to retain legal practitioners with appropriate expertise in IP litigation, as distinct from commercial drafting alone, even if this involves retaining different firms. Further, even amongst larger commercial law firms, levels of fees differ greatly. Attention should be paid at the outset to the charging structures both of particular firms as a whole and also to the practitioners within those firms who would have carriage of the litigation. These factors could have significant costs implications for the running of the litigation. A good method of obtaining advice about appropriate legal representation is to ask other organisations about their experiences.

6.3.6 Obtaining and Preserving Evidence

(a) Generally

A potentially important source of evidence derives from the fact that owners are able to obtain a court order requiring a person to reveal information relevant to the action. This may include the names and addresses of relevant parties, the dates and quantities of importation, and the source of goods or materials.

Orders for discovery are particularly useful in that they enable right holders to obtain access to documents in the possession or control of the other parties to the litigation. These orders are strictly regulated by the courts and it is a contempt of court not to comply with them. The discovery process may enable rights owners to locate working documents showing evidence of infringement, determine the number of infringing documents or articles and to trace the channels through which infringing goods are distributed. The process is of great value in determining the strength of a party's claims.

It should also be noted that in proceedings for infringement of a patent or a PBR, the defendant will generally cross-claim for revocation of the patent or PBR. In anticipation of such an event, it is recommended that an IP owner maintain files of all documents relevant to the grant of the patent or PBR, including test results and the names of the inventors and parties that worked on the project leading to the grant of the patent or

PBR. In many cases, this information is lost, which makes it more difficult for IP owners to defend cross-claims for revocation in infringement proceedings.

(b) 'Anton Pillar' Orders

To enable intellectual property right owners to preserve evidence prior to trial the courts have developed the so-called 'Anton Pillar' order. In essence, an Anton Pillar order is a search order that permits a plaintiff (and their solicitor) to inspect the defendant's premises and to seize or copy any information that is relevant to the alleged infringement. Applications for search orders are made to a judge. As the order aims to ensure that evidence is not destroyed, the application is made without giving notice to the other party. Given the potentially draconian nature of such a 'search' order, they will only be made if the matter is urgent or otherwise desirable in the interests of justice. Before an order will be granted, the courts require plaintiffs to show that they have an extremely strong prima facie case of infringement and that the potential damage to them is very serious. The plaintiff must also provide clear evidence that the defendant has incriminating material in its possession and that there is a real possibility that the evidence will be destroyed. The search order is subject to a number of procedural safeguards. Failure to comply with an order is a contempt of court, which may result in imprisonment or a fine.

6.3.7 Presumptions

Defendants can, and deliberately do, prolong proceedings by forcing plaintiffs to prove that they are the owners of the intellectual property in question. To offset this tactic the legislation provides that certain matters relating to ownership of intellectual property are presumed to be correct unless rebutted by evidence to the contrary. In particular:

- In relation to copyright works apparently published under the name of the author, there is a presumption that the person named is in fact the author and that the author is the first owner of copyright. (But remember this is only a presumption and that it can be defeated, for example, by showing that the work was made in the course of employment such that the employer is the first owner of copyright).
- In relation to registered forms of intellectual property, there is a general presumption that the registered owner was entitled to apply for the right in question.

6.3.8 Costs and Risks

(a) General

We noted at the outset that deciding whether to pursue an organisation or an individual that appears to be infringing your intellectual property rights is ultimately a commercial decision. Consequently, such a decision needs to be made in light of the costs and other risks associated with bringing an action for infringement. Equally, however, thought needs to be given to the risks associated with not pursuing infringers - risks that are sometimes ignored. When considering whether to bring an action it must also be remembered that obtaining legal advice, sending letters of demand etc does not commit the potential plaintiff to proceeding to trial. It may sometimes be appropriate to decide at a particular point to proceed no further. For example, plaintiffs often decide not to proceed if an interlocutory injunction is refused, that is, an order made prior to the final determination of the dispute that prevents the defendant from behaving in a particular way (interlocutory injunctions are discussed in detail in section 6.4.1 below).

(b) Costs and Risks Associated with Bringing Litigation

The costs of running litigation to enforce infringement of IP are substantial. For example, an action for infringement of a patent in the Federal Court (which will invariably involve meeting a cross-claim for revocation of the patent) will cost upwards of \$250,000. Actions for infringement of copyright or a trade mark are generally less costly, but often exceed \$100,000. These costs increase if there is an appeal from the decision of the Federal Court. Even though the Court will generally order that the successful party's costs be paid for, only rarely does this mean that successful parties recoup all of their costs. Generally, successful litigants in the Federal Court recoup between 50% - 70% of their actual expenses. Further, Federal Court litigation is a slow process – patent infringement proceedings, depending on their complexity, may last several years from commencement to judgment.

It will therefore be, in part, a commercial decision as to whether the potential benefits of commencing litigation to enforce IP rights outweigh the costs involved. Litigation is more likely to be an option if the IP involved is especially valuable, the argument in favour of infringement is strong and the potential recoverable damages are high. In other cases, for example involving disputes between a licensor and a licensee, alternative dispute

resolution such as mediation may be more cost effective and less risky. Other issues may impact on the decision to litigate. If action is taken to enforce a patent or a PBR that is close to expiry, by the time a Court decides that the patent or PBR has been infringed, the subject matter may have entered the public domain, thus potentially affecting the damages recoverable. Finally, the political risks involved in an organisation bringing litigation, given the considerable costs involved and the inherent uncertainties as to outcome, should not be discounted.

(c) Risks Associated with Not Proceeding Against Infringers

Risks associated with a decision not to pursue an infringer fall into two categories:

- Firstly, there is the danger that the owner will obtain a reputation as an organisation that is reluctant to enforce its IP rights. This may well encourage the potential defendant and others to ignore the owner's claims to intellectual property protection in the future. In contrast, potential defendants may choose to steer clear of organisations that are known to pursue infringers aggressively; and
- Secondly, certain undesirable legal consequences may flow from a decision not to enforce intellectual property rights. Most dramatically, a failure to enforce certain types of intellectual property may result in the right being lost. In particular, a failure to enforce a confidentiality agreement may result in the disclosure of the protected information, thereby destroying the protected subject matter and any potential future rights (such as patent protection). Generally speaking, once confidential information enters the public domain the party affected by the breach of confidence can no longer prevent others from using that information, and its rights are limited to the recovery of damages arising from the breach of confidence. Similarly, a failure to enforce trade mark rights may result in the mark becoming 'generic', that is, being seen by consumers as a description of goods or services in general, rather than being seen as an indication of the trade origin of the goods or services. In such a case trade mark protection will be lost.

6.4 Civil Remedies

We now turn to consider the various forms of relief or remedy that are available to a plaintiff who is successful in proceedings for infringement of IP. Generally speaking, in actions for infringement of IP rights the remedies available are the same as for

interference with any other property right. Thus, possible forms of relief include an award of damages, a grant of an injunction, and an account of profits.

6.4.1 Interlocutory Injunctions

Perhaps the most important and frequently sought remedy in intellectual property actions is an 'interlocutory injunction' – an order that the defendant stop infringing immediately pending final determination of the action. Such an order can only be granted if the matter is urgent and if it is otherwise desirable in the interests of justice. Violation of an injunction amounts to a contempt of court and can result in fines, sequestration orders or imprisonment.

Because the basis of the grant of relief is that the matter is urgent, such applications are necessarily disposed of quickly and usually on the basis of sworn written evidence which has not been subjected to cross-examination. Consequently, there is the real possibility that the tribunal's view at this interim stage will differ from the final result when matters are aired fully at trial. Courts are therefore keen to ensure that when granting interlocutory relief they do so in a way that does not cause irreparable damage to the interests of either party. Not surprisingly, then, the courts are caught in a tension between whether to examine the issues raised as far as possible so as to ensure the interim decision is as close to the ultimate decision as possible; and whether to ignore the legal issues, since the evidence is necessarily inadequate, and focus largely on minimising the injustices that will ensue from incorrect preliminary intervention. Inevitably, there is debate about whether the existing law adequately reconciles the competing aims that a decision be as "speedy" as possible and as "correct" as possible.

In deciding whether or not to grant interlocutory relief, the courts will consider: first, whether there is a serious question to be tried, in the sense that the plaintiff has a real prospect of succeeding in its claim for a permanent injunction at trial; and, second, whether the balance of convenience lies in favour of granting or refusing interlocutory relief.

The governing principle in deciding whether the balance of convenience favours the granting or refusal of interlocutory relief is whether the plaintiff would be adequately compensated by an award of damages if it were to succeed at trial. If damages would be an adequate remedy and the defendant would be in a financial position to pay them,

then the balance of convenience will usually favour the refusal of interlocutory relief. If, on the other hand, damages would not be an adequate remedy, the court will then consider contrary hypothesis, namely whether the defendant would be adequately compensated by an award of damages if it were to successfully defend the plaintiff's action for infringement at trial. If damages would be an adequate remedy and the plaintiff would be in a financial position to pay them, then the balance of convenience will usually favour the granting of interlocutory relief.

To ensure that the parties have satisfactory financial resources to meet any award for damages given at trial, the courts invariably require as a condition of granting or refusing interlocutory relief that the parties provide an undertaking to pay any damage suffered by either party as a result of granting or refusing interlocutory relief.

Aside from the merits of its case and the financial position of the defendant, the likelihood of a plaintiff succeeding on an application for an interim injunction will also depend upon the IP in question. For example, whilst it is today easier to obtain an interim injunction to restrain infringement of a patent than was once the case, the general feeling is that interim injunctions are difficult to obtain in Australian patent infringement cases. Instead, the courts tend to favour requiring the defendant to give an undertaking as to damages and setting down early hearing dates for the trial. On the other hand, where the IP in question concerns confidential information, the chances of obtaining interlocutory relief are greater because a failure to prevent the defendant from using the confidential information before the trial is heard may lead to the destruction of the subject matter of the claim.

6.4.2 Final Injunctions

A final or 'perpetual' injunction is usually granted to an intellectual property owner who at trial (that is, following the determination of the case by a judge who has reviewed all the evidence thoroughly) proves that its rights have been infringed by the defendant. The effect of such an injunction is to order the defendant not to carry on with certain activities, and hence it is directed at future events (whereas the financial remedies, considered below, operate in relation to past acts). The terms of final injunctions are not limited to the infringing acts performed by the defendant in the past, but extend to any future act by the defendant which would amount to infringement of the protected IP.

The injunction is a discretionary remedy and while such an order will normally be made, it is not granted automatically.

The decision whether or not to grant an injunction will usually depend on the facts of the case. Nevertheless, the courts have indicated a few of the circumstances in which an injunction might be refused: where the infringement is trivial and can be estimated in, and adequately compensated by, money, and an injunction would be oppressive on the defendant; or where a plaintiff is only interested in money; or where the infringing act is old and there is no future threat; or where the term of the IP in question has expired between the time when the action was commenced and the time when it was finalised.

6.4.3 Financial Remedies

At the final determination of an infringement action, a plaintiff will usually seek some sort of financial remedy. Typically, these may be of three sorts:

- first, damages which are intended to compensate the owner of the IP;
- second, restitutionary remedies which are intended to deprive the infringer of profits wrongfully gained as a result of their infringement of the IP; and
- third, 'further damages', that is, damages over and above the amount to cover the loss suffered may be awarded in certain circumstances.

Before we look at each type of monetary remedy in more detail it should be noted that the courts have a discretion to refuse to award a financial remedy for infringement of certain types of IP. In particular, a court may refuse to grant a financial remedy for infringement of a patent or PBR where the court is satisfied that the defendant was not aware, and had no reason to believe, that a patent or PBR existed over the invention or plant variety in question. To avoid this result, patent owners frequently label patented inventions with the patent number ascribed to the patent when it was granted, or in the case of PBR, affix to the packing, in which propagating material is contained, the approved PBR logo (reproduced below). This provides a rebuttable presumption that the defendant was aware that a patent or PBR existed over the invention or plant variety in question.



(a) Damages in Infringement Actions

As to past infringements, the usual remedy is for compensation in damages. The principle behind an award of damages is to restore the owner of the IP to the position he or she would have been in if the infringing act had not been done (not to punish the defendant). It is for the plaintiff to prove the loss, though this is not a matter of scientific precision. It is normally said that the usual measure of damages is 'the depreciation caused by the infringement of the value of the intellectual property right' but this test has also been criticised as providing little practical assistance. It is therefore common practice to calculate damages by reference to the licence fee that the owner would have been able to charge, but such an approach can itself be highly artificial and is not appropriate in every case. An alternative method of calculation where the owner of the IP exploits the IP themselves is the normal rate of profit which the owner of the IP would have made if the sales made by the defendant had have been made by the IP owner (as distinct from the profits made by the defendant – see below). Irrespective of the particular method applied by the courts, the calculation of damages can never be arrived at by a process of arithmetic precision.

(b) Account of Profits

As an alternative to claiming damages a plaintiff may instead elect for an 'account of profits'. An account of profits is a discretionary remedy by which a defendant is deprived of any profits actually made by the defendant through his infringement of the intellectual property right. It is an alternative remedy to damages and cannot be claimed in addition to damages. The plaintiff must make an election at the time of judgment, rather than at the outset of proceedings, whether to seek damages or an account of profits. In calculating the profits, normal accounting principles are applied so that the costs normally attributable to the business in question are deducted from gross receipts. The defendant is only liable to account for those profits which are attributable to its infringement of the IP: any other profits that are not attributable to infringement of the IP must be apportioned or separated from those that are. Rendering an account of profits is therefore a cumbersome, expensive and time-consuming exercise. For this reason courts are, generally speaking, reluctant to exercise their discretion in favour of granting an account of profits unless it is practical and simple to do so.

(c) 'Further' Damages

Damages additional to those discussed above may also be awarded in respect of infringement of IP rights. For example, under the *Copyright Act*, the court may award such additional damages as it sees appropriate having regard to the following factors:

- the flagrancy of the infringement;
- the need to deter similar infringements of copyright;
- the conduct of the defendant after being informed of the alleged infringement;
- whether the infringement involved the conversion of a work or other subject-matter from hardcopy or analogue form into a digital or other electronic machine-readable form; and
- any benefit shown to have accrued to the defendant by reason of the infringement.

Further, the Court has inherent power to award 'aggravated' damages (to compensate the plaintiff for injury to its feelings caused by the defendant's conduct) or 'exemplary' damages (to punish the defendant for acting with outrageous disregard for the plaintiff's rights and to demonstrate the Court's disapproval of such conduct). These are rarely awarded in the IP context.

6.4.4 Delivery up of Infringing Articles

In addition to an injunction and financial remedy, the owner may apply to the court for an order that the infringing articles be delivered up. Such an order can provide an important degree of assurance that the infringing activity will come to an end. Orders for delivery are subject to the discretion of the Court.

6.5 Criminal Offences

6.5.1 Introduction

In modern times, intellectual property rights have been enforced by civil rather than criminal actions. In general, there was little demand for criminal prosecution, with rights-holders preferring the lower standard of proof associated with the civil law. Recently,

however, there has been increased interest in use of existing criminal liabilities and lobbying effort to expand the scope of such liabilities and to increase sanctions. The benefits of pursuing a criminal action are partly that it provides a remedy in cases where the infringer lacks the financial resources to meet an award of damages, but also the publicity that a criminal trial can attract and the deterrence effect of the sanction.

6.5.2 Offences and Penalties

Offences and penalties vary considerably as between different forms of intellectual property:

- In relation to plant breeder's rights, it is an offence to produce, reproduce or sell, import or export propagating material protected by PBR. Unlike criminal liability for infringement of copyright or trade marks, a person may be criminally liable for infringement of PBR irrespective of whether they knew or ought to have known that their acts constitute an infringement of PBR. The penalty on conviction is a fine of up to 500 penalty points (at present, \$55,000). Note that the criminal offences do not apply to the misuse of the registered name of a protected variety.
- In relation to patents, it is a criminal offence to falsely represent that an invention has been patented (for which there is a fine of \$6,000), but criminal offences do not apply more generally to patent infringement.
- In relation to registered trade marks, it is an offence to falsely apply a trade mark to goods or offer services under a mark 'knowing that the trade mark is registered or reckless as to whether or not the mark is registered'. It is also an offence to intentionally sell or otherwise deal in the course of trade with goods that have been falsely marked. The penalty on conviction is a fine of up to 500 penalty points (at present, \$55,000) and/or 2 years imprisonment.
- In the case of copyright, it is an offence to make a copy of a work or to sell or rent or import a copy of a work 'knowing or having reason to believe' that the copy infringes copyright. The penalty on conviction is a fine of up to 550 penalty points (at present, \$60,500) and/or 5 years imprisonment.
- Generally speaking, misuse of confidential information/trade secrets will not attract a criminal sanction in Australia. The position is different in many other countries.

6.5.3 Criminal Procedure and Use of the Criminal Provisions

It must be emphasised that criminal liability is in no sense confined to those normally considered to be 'pirates' and IP owners are increasingly choosing to use the criminal route to pursue infringers in cases of commercial disputes. This use of criminal proceedings is proving controversial because there is concern that defendants who believe they have a strong case and who would be willing to vigorously challenge civil proceedings will capitulate when faced with the threat of criminal conviction. The threat of criminal conviction might prove to be a potentially useful weapon, particularly in relation to Plant Breeder's Rights where the offences are general and do not depend on proving that the defendant was aware, or ought to have been aware, that their conduct was an infringement of PBR. However, these concerns are to some extent offset by the political risk attached to employing the criminal provisions.

If an organisation were interested in bringing criminal proceedings it could do so either by seeking the assistance of the police, which may be advantageous because the police may obtain a search warrant and police action carries a significant social stigma, or (perhaps more realistically) by bringing a private prosecution. It should be noted that even in the latter case, however, there are provisions that would allow Government to intervene. For example, Section 9 of the *Director of Public Prosecutions Act 1986* (NSW) gives the Director power to take over a prosecution commenced by another and either carry on proceedings or decline to proceed further.