

Study unit 1

Patents for inventions

Overview

In this study unit you will be introduced to the law relating to patents for inventions. You will see how these legal rules apply in a factual setting. In short, we will explore the relevance of patent law to certain events. We will also introduce you to the way in which these legal rules are set within an international legal framework.

Learning outcomes

- After completion of this study unit, you should be able to —
- ☐ identify the characteristics of an event that have legal relevance
 - ☐ appreciate the operation of patent law in its international context

Setting the scene

This little episode will introduce you to the subject-matter of this module.

Vusi, an immigrant from Kenya, tells you that for many years his late father made and sold, with considerable commercial success, a beauty cream to his fellow villagers in a remote Kenyan village. He never divulged the composition of the cream. It was certain, though, that one of its ingredients was the powder derived from a milk culture grown amidst much secrecy by the villagers. Shortly before his death, he wrote to Vusi, who by then had settled in South Africa. In his letter, Vusi's late father gave him the composition of the cream so that he can start a new life in South Africa.

Apart from the conventional cosmetic function of the cream, Vusi claims that it can reverse the aging process, and that it operates as a powerful aphrodisiac. Vusi has been working, in confidence, with Thandi, a friend, to set up a small manufacturing process for making the cream. The process has been devised by Thandi, a computer expert, who has written a

computer program to computerize and control the manufacturing process.



Activity 1.1

Make a list of the questions which you think are legally relevant and which are raised by this set of facts.

After you have made your list, read the discussion that follows immediately after this. This will give you feedback.



Feedback

Intellectual property law protects applications of ideas and information that have commercial value. Patents are part of one category of intellectual property sometimes known as industrial property.

Patents are granted for inventions — new technological improvements that contain some measure, great or small, of inventiveness over what is previously known. They have three main characteristics:

- ☐ they issue from a State or regional patent office;
- ☐ they require that the invention be publicly described in the patent specification; and
- ☐ the right they accord is to prevent *all* others (not just actual imitators but even those who make the same invention independently) from using the invention for the duration of the patent.

Generally, Professor WR Cornish (*Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights* 4th ed (1999) § 1-05 pp 7–8) writes:

‘The practical applications of scientific knowledge which make up “technology” are rooted in objective information. Inventions are discoveries about the inherent capacities of matter, and in a sense are waiting to be made. Inventors may proceed by all sorts of routes, but those addressing the same problem are after essentially the same knowledge. A first discovery in a particular field may well be followed by further research results which all competitors in an industry

will need to embody in their products if they are to keep in the market.

'A stage will be reached where further inventions produce both advantages and disadvantages over other ways of making and doing things, at which point product developers will have alternatives to hand. But whether a patent is for a primary breakthrough or for some subsequent development, it will only have industrial value to the extent that it covers all embodiments of its inventive concept. Otherwise there will be ways of taking the idea over without infringing the right and any patent will be good only against simple imitators. A patent system must above all strive to ensure that it gives rights over all applications of the invention revealed but over no more than this — a balance which can be remarkably difficult to achieve.

'The special potential of a patent is accordingly that it may be used to prevent all others from including any form of the invention in their products and services; and where real breakthroughs are patented this potential is occasionally so considerable as to render the competition obsolete. More regularly, a patent poses serious difficulties for competitors. This is why patents are not freely available for all industrial improvements, but only for what is judged to qualify as a "patentable invention".'

At this stage, then, the following questions are crucial to any advice you would give to Vusi:

- ☐ Is there an invention which can be patented? Here, we have a product (the cream) and a process (manufacturing the cream).
- ☐ Is the invention new, in the sense that it has not been disclosed to the public? Here, the cream has been sold to the public for many years with considerable commercial success. Does this amount to disclosing the invention?
- ☐ Is Vusi entitled to apply for a patent? He is not the inventor; his father was.
- ☐ Does the invention claim something which is against the laws of nature (reversing the aging process) or immoral (being an aphrodisiac)?

These are the kind of questions we will ask in this module.

Discussion

International context

A brief history

Statute of Monopolies

Venice

For long it was accepted that historically the first legislation relating to patents was promulgated in Britain in 1624 in the form of the Statute of Monopolies. But later research revealed that the first law of general application empowering the grant of a monopoly was enacted in the city state of Venice on 19 March 1474. This law enabled the sovereign to confer, in response to an application for its grant, a monopoly upon private individuals to exploit a new and ingenious contrivance for a limited period of time within Venetian territory.

Roman-Dutch law

The idea of a territorial monopoly for a limited period of time spread beyond Italy to the rest of Europe, including Britain. That it also gained a degree of recognition in Roman-Dutch law is clear from the following illuminating passage in Voet's *Commentarius ad Pandectas* 1.4.11(ii). With reference to the species of privileges or benefits which the Emperor may grant, Voet states (in Gane's translation):

'There are other privileges by which from special favour it is only granted to certain persons by way of monopoly to carry on this or that form of art, craft or trade, when they themselves have either by their personal industry invented it, or after its discovery have greatly enlarged and developed it, or at their own expense and risk have made it useful and profitable. In this class should be included the power vouchsafed to both the East and West India Companies to carry on business in those quarters to the exclusion of others who are not members of those companies; as well as the rights which it is the custom to grant every day to the inventors of new things, to printers about to publish costly volumes and to many others of that class.'

guilds

patent monopolies

In England, privileges in the nature of a monopoly were initially granted only to towns and to merchant and craft guilds. The grant of monopolies was subsequently extended to include individuals, the first being that made by Edward III in favour of John Kempe in 1331, to exercise and teach his trade of woollen-cloth weaving. The grant of privileges of this nature encouraged inventive industry in England, and led to the introduction of new and beneficial industries from abroad. Unfortunately, patent monopolies, as the grants were known, came to be injudiciously granted by the monarchy in respect of almost any kind of activity. This was particularly true of the

Tudor and Stuart monarchs, who did so to reward favourites of the royal court or to obtain revenue in return for a grant. Parliament frequently criticized these monarchal abuses, and they became a major feature of the struggle for power between Crown and Parliament.

common-law jurisdiction

In 1601, Queen Elizabeth I, in anticipation of drastic action by Parliament, cancelled the most objectionable patents, and conceded that the common-law courts could sit in judgment of those remaining.

Case of Monopolies

Darcy v Allein (1602) Moore KB 671; 11 Coke 846 (KB 1602) (known as the *Case of Monopolies*) was the first matter concerning monopolies to come before the courts. The law then applicable was correctly formulated by counsel:

'Now therefore I will shew you how the judges have heretofore allowed of monopoly patents which is that where any man by his own charge and industry or by his own wit or invention doth bring any new trade into the Realm or any Engine tending to the furtherance of a trade that never was used before and that for the good of the Realm; that in such cases the King may grant him a monopoly patent for some reasonable time, until the subjects may learn the same, in consideration of the good that he doth bring by his Invention to the Commonwealth; otherwise not.'

Since this action was brought at common law, the court found that a privilege granted to an official of the Royal Court for the importation and selling of playing cards was an illegal monopoly.

Statute of Monopolies

This decision and those following it did not settle the patents conflict. The matter was finally disposed of by Parliament through legislation with the enactment of the Statute of Monopolies in 1624. The statute provided that monopolies and letters patent were and always had been null and void, subject to one exception:

'... letters patent and grants of privilege for the term of fourteen years or under thereafter to be made, of the sole working or making of any manner of new manufacture within this realm, to the true and first inventor and inventors of such manufacturers which others at the time of making such letters patent and grants shall not use, so as also they be not contrary to the law or mischievous to the State.'

Patents Act 1977

This statute has provided the basis for much of the subsequent English patent legislation. The English law of patents has, of course, been much extended and developed since 1624. The Patents Act 1977 currently regulates the position.

Patents Act of 1978

In South Africa, the grant of privileges was governed by Roman-Dutch law until the promulgation of Act 17 of 1860 (Cape of Good Hope) and Law 4 of 1870 (Natal). Currently, the position is regulated by the Patents Act 57 of 1978. It deals with all aspects of patent law. Common-law principles play a minor part only, in relation to matters such as the employer's right to an invention made by her employee.

An international system?

Paris Convention

Paris Union

In 1883, the patenting countries of the nineteenth century formed a modest union under the Paris Convention for the Protection of Industrial Property.

National treatment

The Convention guarantees the nationals of each member state the same treatment in other member states as they give to their own nationals (article 2). This principle of national treatment is extended to apply also to nationals of countries outside the Union who are domiciled or have real and effective industrial or commercial establishments in the territory of one of the member states of the Union (article 3).

Convention priority

The Convention also establishes the system of Convention priority: a patent application filed in one of the member states gives a period of twelve months in which to pursue an application in any other member state. The later application will have the same priority date as the first. See further Study Unit 3 below.

compulsory licences

The Convention also deals with the independence of patents, inventor's rights, importation and compulsory licences, grace periods for the payment of maintenance fees, patents in international traffic, and patents in relation to international exhibitions. These provisions will be examined in the appropriate study units below.

Patent Cooperation Treaty

special agreement

The Patent Co-operation Treaty (PCT) is a multilateral treaty to simplify the work connected with obtaining patents for inventions. It is a special agreement under the Paris Convention. It was adopted in 1970 and came into effect on 1 June 1978. Its central administration is provided by the World Intellectual Property Organization (WIPO) in Geneva.

international application

With the PCT, it has become possible to file a single international application which has the same effect as filing separate applications with the patent office of each country party to the PCT which is designated in the application. See further Study Unit 3 below.

examination

For now, note that the PCT is important to any country that opts for some form of examination before registration of a patent. After the filing of a single international application which designates the PCT countries in which the applicant wants to have a patent registered, the PCT provides for two things:

international search

❑ chapter I creates an international search conducted by one of a small number of international search authorities; whilst

preliminary examination

❑ chapter II establishes an International Preliminary Examination.

Participating states need not adhere to both chapters, and an applicant need not have the preliminary examination.

report

Note also that the PCT is not founded upon any international agreement about the grounds of validity for a patent. So the preliminary examination reports only on a limited number of basic questions according to some general criteria in the Treaty (see article 33). But for countries without an examining system, the report may provide a basis upon which a national patent office, applying its own law, can decide whether or not to grant a patent. It was to create this opportunity for developing countries that chapter II was introduced in 1978. This also means that the PCT does not provide an 'international patent': each national (or regional) patent office still decides what patents to grant for its own territory.

developing countries

TRIPS Agreement

World Trade Organization

One of the most ambitious steps towards harmonizing substantive patent law occurred in 1994. The Uruguay Round of multilateral trade negotiations held under the framework of the General Agreement on Tariffs and Trade (GATT) concluded on 15 December 1993. The agreement embodying the results of those negotiations — the Agreement Establishing the World Trade Organization (WTO) — was adopted on 15 April 1994 in Marrakesh. It entered into force on 1 January 1995 and binds all WTO members. Annex 1C of this agreement is the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement). All states which become members of the WTO are bound to a mutual recognition of a high level of intellectual property protection (article II.2 of the Marrakesh Agreement).

In the present context the following features of the TRIPS Agreement are important:

f

flexibility

- ❑ *Flexibility of implementation* — members of the WTO are free to determine the appropriate method of implementing the TRIPS provisions within their own legal system and practice (article 1(1)).

national treatment

- ❑ *National treatment* — each member should accord to the nationals of other members treatment no less favourable than that which such member accords its own nationals with regard to the protection of patents, subject to the exceptions stated in the Paris Convention (article 3(1)).

most-favoured nation

- ❑ *Most-favoured-nation treatment* — subject to certain stated exceptions, any advantage, favour, privilege, or immunity granted by a member of the WTO to the nationals of another country should also be made available unconditionally to the nationals of all other members of the WTO (article 4).

Paris Convention

- ❑ The TRIPS Agreement incorporates Articles 1 to 12 and 19 of the Paris Convention (article 2(1)).

European Patent

- ❑ The provisions on patentable subject-matter, adequate disclosure, patent term, and the rights conferred draw to a significant extent on the European Patent Convention

Convention

(1973) and the Community Patent Convention (1975).

dispute settlement

A major step forward has been taken in respect of enforcement. Breach by a member state of the WTO of its TRIPS obligations may lead to the GATT dispute settlement procedure. The outcome of such procedure may, if necessary, be sanctions withdrawing GATT advantages. These may include the suspension of concessions in the same commercial or industrial sector, or even cross-retaliatory measures such as the imposition of quotas or other exclusions on a country's export of goods or services.

developing countries

technical assistance

On 22 December 1995, WIPO and the WTO entered into an agreement in terms of which, among others, substantial legal-technical assistance and technical cooperation are made available to developing countries (article 4) to enable them to adopt the legislation and establish the structures necessary to discharge their obligations under the TRIPS Agreement.

African regional system: ARIPO

Lusaka Agreement

In December 1976, a number of English-speaking African countries met in Lusaka. They entered into an agreement to create an industrial property organization for English-speaking Africa. This organization became known as ESARIPO (an acronym for the English-Speaking Industrial Property Organization).

Membership of ESARIPO was originally open to certain member states of the United Nations Economic Commission for Africa. Among the original members were Botswana, Lesotho, and Swaziland. Zimbabwe later subscribed to the agreement.

In 1982, a protocol was adopted in terms of which ESARIPO was empowered to grant patents and to administer them for the contracting states. In 1985, the name of the organization was changed to the African Regional Industrial Property Office (ARIPO), to open membership of the organization to all member states of the United Nations Economic Commission for Africa. The ARIPO office is located in Harare.

Patent Law Treaty

procedural aspects

On 1 June 2000, the Diplomatic Conference for the Adoption of the Patent Law Treaty adopted the Patent Law Treaty (PLT). It will enter into force three months after ten instruments of ratification or accession by states have been deposited with the Director General of WIPO (article 21(1)). Again, the treaty does not set substantive standards to determine patentable subject-matter but merely concerns itself with harmonizing application procedures and time limits.

Conclusion

You should by now appreciate that a patent is a type of industrial property which protects the right of an inventor to certain inventions — those which qualify as ‘patentable inventions’. You should also appreciate that a national patent system functions within the context of a number of international agreements (conventions and treaties). Most of these are concerned with the formalities which must be complied with and the procedures which should be followed to obtain a patent. Others, far fewer in number, attempt to harmonize the standards used to determine whether an invention is patentable.