ment in research and development for the benefit of mankind, and third that they give no right to use inventions where other regulations such as, *e.g.* animal protection laws, are involved. And above all, patents are a main driver for future pharmaceutical innovation which will help alleviation, early detection and prevention, and cure of disease.

Received: March 21, 2000

- D. Büchel, M. Brauchbar, 'Patents in Biotechnology – Its Importance for Small- and Medium-sized Businesses and Universities', Interpharma, June 1997.
- [2] C.E. Barfield, C. Beltz, 'Balancing and Rebalancing the National Interest in the Patent

System', American Enterprise Institute, October 1995.

- [3] Boston Consulting Group, 'Sustaining Innovation in U.S. Pharmaceuticals: Intellectual Property Protection and the Role of Patents', January 1996.
- [4] Pharmaceutical Industry Profile, PhRMA, 1999.
- [5] Pharmaceutical Manufacturers Association of Canada, Annual Review **1998–1999**.

Chimia 54 (2000) 320–324 © Neue Schweizerische Chemische Gesellschaft ISSN 0009–4293

# **Enforcement of Intellectual Property** Laws

Martin J. Lutz [1]

Abstract: The present article concentrates on Patent Law with some comparison with the less contested problems of Trademark and Copyright enforcement.

By the Grant of Patents, the State conveys to the Patent Owner an absolute right over commercially applicable technical achievements for a limited period of time. The Patent Owner has an exclusive right to exercise the invention, to permit third parties to work the invention against compensation and to prevent its unauthorised use. Effective patent protection requires not only a reliable system of grant and administration but equally important an effective system of enforcement. The TRIPs agreement which forms part of the GATT Agreements concluded in Marrakech in 1994 has established uniform minimum standards of enforcement practically worldwide. The implementation of the TRIPs Agreement is far from completed.

In Switzerland 26 Cantonal Courts are competent for patent enforcement. With the exception of the five Courts of Commerce (Zürich, Bern, Aargau, St Gallen and Geneva) the competent Courts have no technical knowledge and little experience in patent matters. The Courts are forced to rely almost exclusively on outside experts even in injunction proceedings. As a result, patent enforcement in Switzerland is often very slow and there is little reliability and continuity of jurisprudence. As the Supreme Court may only re-examine questions of law and considers itself as bound by the facts established by the Cantonal Courts including Court Expert opinions it is unable to impose the desirable harmonisation of patent law jurisprudence. Patents that cannot be properly and timely enforced are of limited value. Insufficiencies of the enforcement procedures in Patent Law in Switzerland are detrimental to the encouragement of research and development and thus to the Swiss economy. It would be desirable to concentrate the enforcement of Patent Law in Switzerland to a Federal Patent Court with panels of technically trained judges composed by a Court of First Instance (possibly with two Chambers for the German and French part of the Country) and a Federal Court of Appeals following the US example.

Keywords: Enforcement · Intellectual property · Litigation · Patents · TRIPs

\*Correspondence: Dr. M.J. Lutz Attorney-at-Law Lenz & Staehelin Bleicherweg 58 CH-8027 Zürich Tel.: +41 1 204 12 12 Fax: +41 1 204 12 00 E-Mail: m.lutz@lenzstaehelin-zh.com

## 1. Introduction

'Intellectual Property Rights' (IP Rights) are legal rights which protect mostly intellectual, creative achievements as opposed to property rights in material objects. Three different groups of protection may be distinguished:

### a) Protection by Formal Act

Achievements which fall in this category are:

- i) Inventions protected by Patents
- ii) Distinctive Signs consisting of words or figurative elements protected as Trademarks

CHIMIA 2000, 54, No. 5

ment in research and development for the benefit of mankind, and third that they give no right to use inventions where other regulations such as, *e.g.* animal protection laws, are involved. And above all, patents are a main driver for future pharmaceutical innovation which will help alleviation, early detection and prevention, and cure of disease.

Received: March 21, 2000

- D. Büchel, M. Brauchbar, 'Patents in Biotechnology – Its Importance for Small- and Medium-sized Businesses and Universities', Interpharma, June 1997.
- [2] C.E. Barfield, C. Beltz, 'Balancing and Rebalancing the National Interest in the Patent

System', American Enterprise Institute, October 1995.

- [3] Boston Consulting Group, 'Sustaining Innovation in U.S. Pharmaceuticals: Intellectual Property Protection and the Role of Patents', January 1996.
- [4] Pharmaceutical Industry Profile, PhRMA, 1999.
- [5] Pharmaceutical Manufacturers Association of Canada, Annual Review **1998–1999**.

Chimia 54 (2000) 320–324 © Neue Schweizerische Chemische Gesellschaft ISSN 0009–4293

# **Enforcement of Intellectual Property** Laws

Martin J. Lutz [1]

Abstract: The present article concentrates on Patent Law with some comparison with the less contested problems of Trademark and Copyright enforcement.

By the Grant of Patents, the State conveys to the Patent Owner an absolute right over commercially applicable technical achievements for a limited period of time. The Patent Owner has an exclusive right to exercise the invention, to permit third parties to work the invention against compensation and to prevent its unauthorised use. Effective patent protection requires not only a reliable system of grant and administration but equally important an effective system of enforcement. The TRIPs agreement which forms part of the GATT Agreements concluded in Marrakech in 1994 has established uniform minimum standards of enforcement practically worldwide. The implementation of the TRIPs Agreement is far from completed.

In Switzerland 26 Cantonal Courts are competent for patent enforcement. With the exception of the five Courts of Commerce (Zürich, Bern, Aargau, St Gallen and Geneva) the competent Courts have no technical knowledge and little experience in patent matters. The Courts are forced to rely almost exclusively on outside experts even in injunction proceedings. As a result, patent enforcement in Switzerland is often very slow and there is little reliability and continuity of jurisprudence. As the Supreme Court may only re-examine questions of law and considers itself as bound by the facts established by the Cantonal Courts including Court Expert opinions it is unable to impose the desirable harmonisation of patent law jurisprudence. Patents that cannot be properly and timely enforced are of limited value. Insufficiencies of the enforcement procedures in Patent Law in Switzerland are detrimental to the encouragement of research and development and thus to the Swiss economy. It would be desirable to concentrate the enforcement of Patent Law in Switzerland to a Federal Patent Court with panels of technically trained judges composed by a Court of First Instance (possibly with two Chambers for the German and French part of the Country) and a Federal Court of Appeals following the US example.

Keywords: Enforcement · Intellectual property · Litigation · Patents · TRIPs

\*Correspondence: Dr. M.J. Lutz Attorney-at-Law Lenz & Staehelin Bleicherweg 58 CH-8027 Zürich Tel.: +41 1 204 12 12 Fax: +41 1 204 12 00 E-Mail: m.lutz@lenzstaehelin-zh.com

## 1. Introduction

'Intellectual Property Rights' (IP Rights) are legal rights which protect mostly intellectual, creative achievements as opposed to property rights in material objects. Three different groups of protection may be distinguished:

### a) Protection by Formal Act

Achievements which fall in this category are:

- i) Inventions protected by Patents
- ii) Distinctive Signs consisting of words or figurative elements protected as Trademarks

CHIMIA 2000, 54, No. 5

iii) Industrial Designs protected by Design and Model Laws.

## b) Achievements Protected by Law without any Formal Act of Registration

This category includes:

- iv) Works of Art including literature, music, and software protected by Copyright, and
- v) Performing Rights of artists and certain other copyright related achievements protected as Neighbouring Rights.

## c) Achievements with Circumstantial Protection only

Achievements which fall into this category enjoy no protection by an absolute right. This third category includes:

- vi) Know-how protected primarily by Contract, and
- vii)Market Activities protected by Laws Against Unfair Competition.

We concentrate on the first two groups here.

## 2. History

The protection of inventions for a limited period of time can be traced back to the 15th Century. By decree of March 19, 1474 the Republic of Venice granted a 10-year privilege for new inventions realised in the Republic. Copyright privileges as a form of protection of printers rather than authors became widespread in the early 18th Century. At the end of the 18th Century the Revolutionary Government of France and the United States in their new constitutions introduced almost in the same year a general protection for inventions and works of art. In France the idea of a patrimonial right of the author over his work as a natural right stood in the foreground. In the United Stated the patent protection of inventions and copyrighted works was rather conceived as a reward for the contribution to culture and technology by the disclosure of intellectual creations and as an incentive for further creative activity.

In 1883 and 1886 a minimum protection of IP Rights was introduced by international treaties (Paris Convention for the Protection of Industrial Property of 1883, Berne Convention for the Protection of Literary and Artistic Works of 1886). During the last 100 years these two key treaties were gradually improved and enlarged into umbrellas of whole treaty networks. The number of states that adhered to these treaties grew steadily. The Paris and Berne Conventions are virtually universal today. One important characteristic of these classic IP treaties is that they harmonised the minimum protection granted by the member states at a high level and in considerable detail, but did not regulate the enforcement of the rights granted.

### 3. Enforcement as a General Issue

A patent granted which cannot be enforced is without value. It is actually worse than no patent. In return for the grant of the patent the inventor is obliged to make the invention public. In the absence of enforceability of the patent the inventor loses control over his invention, which is shared with competitors without compensation. If no patent is filed for an invention, the invention remains secret forever. The Coca Cola formula is a classic example of an invention protected by secrecy and not by patent. It was well known for many years that the enforcement of IP laws in a great number of countries was utterly insufficient.

The classic IP treaties are administrated by WIPO (World Intellectual Property Organisation). The unwillingness or inability of WIPO to take up enforcement issues on an international scale prompted GATT to include IP Rights in its Uruguay Round in the late 80s. The result was the so-called TRIPs Agreement (Agreement on Trade Related Aspects of IP) which forms part of the treaties concluded by GATT on April 15, 1994 in Marrakech. Two aspects of TRIPs ought to be noted:

- TRIPs declared the Paris Convention, the Berne Convention, and some ancillary WIPO treaties as GATT/WTO minimum standard of IP protection. By this act WTO practically forced all GATT/WTO members that had not done so before to adhere to these treaties. The minimum protection by the WIPO treaties was further specified in a substantive part of the TRIPs Agreement (Art. 9 to 40).
- The second, equally important aspect of TRIPs is that it established binding treaty rules on the enforcement of IP Rights (Art. 41 to 61).

## 4. Enforcement of IP Rights under TRIPs

There are two distinct levels of enforcement:

- The first concerns the adequate administrative handling of IP matters by the government. There is still a considerable number of countries with beautiful IP laws in the books but a rather ineffective administration that is not geared to grant IP protection by patent, trademark, or design on a nondiscriminatory, reliable, and timely basis. The minimum standards of these enforcement aspects in TRIPs are relatively modest and not very specific (Art. 62 to 64).
- The second level of enforcement is the enforcement of IP Rights granted against infringement by third party. In this field the TRIPs rules are very specific (Art. 41 to 61).

The basic rule in TRIPs is that the members of GATT/WTO are bound to provide effective, fair, and cheap procedures to stop and prevent infringement (Art. 42 to 49) including preliminary injunctions (Art. 50) and measures by custom authorities at the border (Art. 51 to 60).

The effectiveness of the basically beautiful enforcement rules of TRIPs is limited in three respects:

- Developing countries were granted a grace period of five years to implement the TRIPs rules (Art. 65). For the least developed countries the grace period is even ten years (Art. 66). It appears that many countries understand this respite not as a grace period to implement but as a grace period to start with the first steps of implementation.
- ii) TRIPs does not rule on parallel import. This leaves a large door for nonenforcement open, in particular in import-oriented countries.
- iii) The IP Right holders as the parties concerned are virtually powerless if a GATT/WTO member does not fulfil its TRIPs obligations. Only member states of GATT/WTO may take steps against the non-fulfilment of TRIPs obligations by another member state. This barrier renders treaty enforcement totally ineffective in individual cases of violation of the enforcement obligations of TRIPs by member states.

#### 5. Form and Characteristics of Enforcement

Intellectual property rights grant to the right holder an absolute (patent, trademark, design, copyright, and neighbouring rights) or relative (secrecy, protection against unfair competition) monopoly. The two key elements of enforcement are:

- i) to prevent unauthorised use of the protected achievements, and
- ii) compensation for unauthorised use of the protected achievement that has occurred.

In most cases the right holder is primarily interested in the prevention of unauthorised use. This is particularly true in patent law, trademark law, and design law. In the copyright field, however, it may even be desirable for the right holder that his work is consummated as widely as possible, provided royalty is paid. The two main forms of enforcement have particular characteristics.

## 5.1. Protection against Unauthorised Use

Effective protection against unauthorised use depends on two requirements: Time (i) and Implementation (ii):

i) Time

The right holder has a justified interest to obtain an enforceable ruling on his cease and desist request aimed at a termination of unauthorised use at reasonably short notice. If it takes three or five years until the courts pronounce a cease and desist order, the exclusive right is hopelessly eroded. In particular in the trademark field where branded goods stay often for a very limited time in fashion, an early defence of the monopoly is crucial. If a patent owner in the process of building up its own market finds itself in competition with an economically stronger competitor, enforcement of the monopoly may equally be essential. In order to accommodate the necessity of an early protection against unauthorised use, most countries have introduced a temporary form of protection by preliminary injunction. Courts are given the authority to decide in summary proceedings whether the right holder has a prima facie case of infringement and to grant injunctions at short notice in simplified proceedings.

The main action with full blown hearings which follows the injunction proceedings takes of course longer, but since it takes place under the umbrella of an injunction already previously granted, it can afford to use more time. As a result the court dealing with the main action will either confirm or reject the injunction granted summarily before. This two-step approach has been taken over by the TRIPs Agreement. As a concept it is probably the only adequate solution to guarantee reasonable protection against unauthorised use. However, its shortcomings should not be overlooked.

As preliminary injunctions are granted in summary proceedings, they are by necessity decided after an incomplete hearing based on summarily established facts. This means inevitably that there is an increased risk of wrong decisions. In the case of patents covering complicated technology the difficulty of a comprehensive presentation of decisive technical aspects may render it difficult for the patent holder to obtain an injunction. On the other hand a summary determination of the scope of protection may lead to unwarranted injunctions against a competitor unable to present a full defence.

In Switzerland the absolute liability of the right holder for damages created by an unjustified preliminary injunction constitutes a reasonable safeguard against light-hearted demands for a cease and desist order in summary proceedings. A particular difficulty for the right holder seeking a cease and desist order in patent matters may be the lack of detailed knowledge of the alleged infringement form. Some countries permit the sequestration of the infringement form (saisie contrefacon) in order to establish whether a patent is infringed. In Switzerland the law would admit such measures as well, but the jurisprudence has regularly refused cooperation to any endeavour to use injunction proceedings to establish evidence. Since the adoption of the TRIPs Agreement the protection of the right holder against unauthorised use has been considerably strengthened by the obligations of the custom authorities to co-operate in transborder infringements.

#### ii) Implementation

The cease and desist ruling consists usually of a court order to the infringer to stop infringing activities. Exceptionally the courts go further and sequestrate infringing goods. In case of actions of the custom authorities this is the rule. The effectiveness of the court order depends entirely on the deterring effect of the sanctions imposed if the order is disregarded. These sanctions are very harsh in Anglo Saxon countries (contempt of court). They are very ineffective in Switzerland (Art. 292 StGB).

#### 5.2. Compensation for Damages

One of the discomforting problems of IP enforcement is the difficulty to calculate damages. How can the right holder prove lost business opportunities? How can he prove what turnover he would have achieved in the absence of an infringement? How can he prove the influence of the infringement on prices?

The United States tend to assess damages by estimate rather than by proof. In addition they have a system of double and triple punitive damages which go beyond damages actually incurred. This makes the recovery of the loss incurred by IP infringement somewhat easier but introduces an element of arbitrariness.

The continental European jurisprudence imposes a bigger burden on the right holder.

Several systems to calculate damages exist:

- Actual damages, with the difficulty of proof,
- Reasonable royalty calculated in the abstract, or
- The handing over of profits of the infringer.

In practice a reasonable royalty is the easiest and most reliable method of calculation. It is unsatisfactory, because in effect it results in an enforced license and leaves the disadvantage of a shared market uncompensated.

In Switzerland the right holder has the option to claim initially both damages and the handing over of profits of the infringer. The right holder has to opt for one of the two methods of calculation only after the evidence has been taken. This system is well intended but renders the damage actions complicated and lengthy, with the result that they are very seldom litigated to the end but often settled.

### 5.3. IP Litigation in Practice

Because damage actions often take a long time, infringement suits are often divided into two parts:

- The object of the first part of the proceedings is a declaratory judgement on the infringement and a cease and desist order.
- In the second part, damages are calculated and adjudicated.

### 6. Enforcement of IP Rights in Switzerland

### 6.1. Main Action

The fact that Switzerland is a federation of states is very noticeable in matters of civil and criminal procedure. Each canton has its own court system and its own law of procedure. Although only one court is competent for IP matters in each canton under federal law, there are still 26 competent courts in Switzerland for IP matters. Another particularity of the Swiss court system is that the Supreme Court may upon appeal only examine the lower court's interpretation of law but not its findings of facts. In most other industrialised countries IP matters, in particular patent matters, are concentrated in the hands of only one or a very limited number of often highly specialised courts. The negative consequences of the Swiss judicial patchwork are less apparent in copyright and trademark law than in patent matters.

Copyright and trademark disputes require, with the exception of software disputes, little special technical skill or knowledge. Judges of the courts with their legal background can grasp the factual issues presented in copyright and trademark matters without undue difficulty. IP cases do not abound in Switzerland. Cantonal courts which are confronted less than once a year with IP cases have inevitably difficulties in gaining experience in this field and in developing any continuity of jurisprudence. In copyright and trademark matters the Supreme Court may make good these shortcomings to a large extent. The issues in dispute are predominantly of a legal rather than of a factual nature. The restriction of the Supreme Court's competence to matters of law is, therefore, often no serious disadvantage. A certain uniformity of jurisprudence can be developed and enforced by the Supreme Court.

In patent law matters are different. Patent law disputes, in particular in the field of chemistry or biotechnology, are with great regularity extremely intricate. It is difficult if not impossible to understand and appraise the facts presented without the necessary technical knowledge. It is characteristic that in a recent case the instructing judge sent a claim back to the plaintiff with the excuse that he did not understand the technical issues raised and asked for presentation in a form understandable to a non-technician. This is easier said than done in a biotechnology matter. A complicated technical patent issue may certainly not be excluded from legal protection simply because it emanates from a difficult technical field

Swiss Cantonal courts have no technical knowledge. Courts of commerce as they exist in Zürich, Aargau, Bern, St. Gallen and Geneva count among their ranks some lay judges with a technical background but not necessarily in the right field. There are about 15 to 20 patent cases a year in Switzerland. Allocated to 26 cantons, that means about one to two cases per year to the courts of the industrialised cantons and about one case every two to five years to the others. This is evidently not enough to gain experience in the management of patent cases. Many judges instruct only one or two cases in a lifetime. The volume of patent cases, the difficulty of dealing with documents (often in English) of a highly technical nature, the difficulty to evaluate adequately evidence, and expert opinions filed by the parties or established by a court expert often exceeds by far the cantonal court's logistic abilities.

The consequences of our very traditional court system are clearly detrimental to the enforcement of patent law in Switzerland. Experience shows that courts tend to be overawed by the complexity of patent disputes. The mission to render justice expeditiously (and at low cost) as TRIPs prescribes tends to be overshadowed by the anxiety not to be drowned by the complications of the case which the judges have hardly time to study appropriately in depth given the usually high workload.

Practical experience in part reflected in the published decisions show that the difficulty of handling patent cases tends to favour three rather inadequate patterns:

- i) the tendency to place procedural issues above the aim to render justice,
- ii) the tendency to postpone the cases unduly, and
- iii) the tendency to delegate the decision exclusively to a court expert whose findings are followed almost blindly.

As much as the first (i) and the second (ii) method of handling patent cases are understandable, they are highly unsatisfactory to the patent owner who seeks protection against infringement. They actually result in a material denial of the effective enforcement guaranteed by the TRIPs Agreement.

The almost blind reliance on the findings of the court expert (iii) is almost inevitable if the court lacks the technical knowledge to evaluate the conclusions of the expert and the criticism that the parties may present. The consequences are that even a largely erroneous and unfounded court expert opinion is likely to be accepted as the basis of the decision.

As the findings of the expert about novelty, inventive activity, infringement and equivalence are in theory findings of fact although they prejudice the findings of law the Supreme Court is prevented from re-examining the essential elements of the lower court's conclusions. It is unable to serve as a corrective and to safeguard continuity of jurisprudence.

## 6.2. Preliminary Injunctions

In accordance with the TRIPs Agreement Swiss law provides for preliminary measures in summary proceedings in both substantive law and the cantonal laws of procedure.

Because the main actions tend to be ponderous and slow (as described above), the so-called injunction proceedings play a key role in the enforcement of IP Rights against unauthorised use. Injunctions are in fact more often than not prejudicial for the entire dispute. If a branded good or a cosmetic or pharmaceutical product is banned from the market for four or five years (the duration of the main action) the momentum may be lost or the product outdated until the final decision is rendered.

To rule about patent claims and if the defence is raised about patent validity in summary proceedings is a tricky business. The competent court consists usually of a single judge who has no technical knowledge. In patent law technical differentiation often requires fine distinctions. If chemical compounds are described by their function rather than by their composition as is often the case in biotechnology, summary proceedings are not really the ideal approach to determine the scope of protection of a patent.

Swiss jurisprudence has recognised this difficulty and has, therefore, admitted court experts to compensate for the absence of technical knowledge of the judges even in summary proceedings. This concession reduces of course the risk of the arbitrary grant or refusal of injunctions by a judge without technical knowledge. However, it tends to deprive the injunction proceedings of their original function of temporary protection granted at short notice. In one published case (SIC! 1997/2 p. 208ff) it took four and a half years until an injunction was granted by the first instance and almost seven years from the date of the injunction request to the date of a binding ruling.

## 6.3. Conclusions Concerning the IP Enforcement in Switzerland

- The enforcement of trademark and copyright is hampered by the allocation of the relatively few cases to 26 different cantonal courts.
- As the issues are usually of a legal rather than of a factual nature, the Supreme Court has authority to ensure a certain uniformity and continuity of jurisprudence.
- In patent matters an effective, reliable, expeditious, and cheap enforce-

.

ment as provided by the TRIPs Agreement is not guaranteed in Switzerland.

- The absence of technical knowledge of the competent judges in injunction proceedings renders court expert opinions necessary. This prolongs the injunction proceedings unduly. The absence of technical training of the judge forces the court to rely almost entirely on the court expert and to delegate in fact the decision to an outsider who is not a member of the court.
- The allocation of 15 to 20 patent cases a year to 26 competent courts without technically trained and specialised judges renders patent litigation in Switzerland not only slow but also prevents the building up of a harmonised and reliable jurisprudence.
- According to published data Switzerland spends about CHF 11 billion per annum in research and development. It is the country with the highest density of patents per capita in the world.

- In the light of these investments it is surprising that so little effort is made by our Government to introduce a more effective enforcement of IP Rights in Switzerland.
  - Unless research results cannot only be properly protected but the protection can also be enforced expeditiously before knowledgeable courts (at reasonable cost) patent protection is of little value.

## 7. Outlook

It is regrettable that at present the enforcement of patents in Switzerland is not satisfactory and may probably be incompatible with the TRIPs Agreement. The remedy would of course be to follow the example of other European countries and to create a specialised court, preferably a federal patent court equipped with panels of technically trained judges possibly in the form of two lower courts for the German and French/Italian parts of the country and a Federal Court of Appeals following the US example.

The practising lawyer wonders sometimes why the industry which holds the majority of the patents and must have a genuine interest in an effective patent protection is not exercising more pressure toward an improvement of our inadequate judicial system. It appears that the cantonal courts would in general not be opposed to be exonerated from the unwelcome burden of patent litigation.

#### Received: March 20, 2000

[1] Dr. Martin J. Lutz is attorney-at-law and one of the senior partners in Zürich of the Law Firm Lenz & Staehelin (Zürich, Geneva, Lausanne, Fribourg). He is specialised in Intellectual Property Law and Arbitration. He is President of Honour of the world's leading non-governmental Intellectual Property Organisation, the International Association for the Protection of Industrial Property (AIPPI).