

# Intellectual Property and International Trade

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## Introduction

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One of the principal areas of trade policy interest — and at times conflict — in recent years has concerned intellectual property rights.<sup>2</sup> In a period of accelerating technological change and increased world trade, these rights have become more valuable to those who develop or own them. Conversely, the use, import or transfer of technology under reasonable terms has become more important for competitiveness and growth in virtually all countries engaged in international trade. Trade disputes over intellectual property have mounted rapidly in recent years as intellectual property owners have pressed their governments to strengthen intellectual property regimes domestically and internationally, including the use of border action or domestic courts to protect their rights.

To a significant extent, the same issue that has formed a central part of the international discussion concerning intellectual property has mirrored long-standing debate and legislative initiatives in various national jurisdictions. That issue is how society as a whole should encourage innovation and creative expression most efficiently and fairly, while at the same time ensuring that it has reasonable access to the knowledge or creativity thereby created.<sup>3</sup>

Countries at different times in their economic development, and different countries at broadly the same stage of economic development, have come to different outcomes or solutions with respect to this issue.<sup>4</sup> While countries have also used policy instruments other than the granting of intellectual

property rights such as tax incentives, subsidies, and government research and development contracts to encourage innovation and creativity, most have used, in varying degrees and with varying levels of enforcement, the decentralised and largely market-driven incentive system of intellectual property protection.

With respect to these rights, which consist of the granting by government of a limited monopoly to the originator or owner of the intellectual property to use his or her innovation or artistic creation, countries have also set out particular rules and procedures for ensuring that the invention or creative work is made available to the broader public. Individually, governments have established, in effect, a domestic intellectual property bargain. Internationally, the nature of this bargain between originators or owners of intellectual property and users is even more difficult to define and to agree upon. It is on this complex area that this article will focus.

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## The Policy Context

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The overall purpose of intellectual property rights is to encourage innovation and creative expression by granting to developers of goods or services an exclusive but limited right to whatever returns their works might bring in the market place. The rights are generally limited both in time and in scope. A patent right is generally limited by a term of 20 years from the date of filing, a copyright by the life of the artist, plus between 25 and 50 years. With respect to scope, many patent terms are limited by provisions for compulsory licensing<sup>5</sup> and by renewal fees and cannot be obtained at all for basic research or for innovation involving living things.<sup>6</sup> Further, there are limitations about what constitutes infringement of intellectual property rights.<sup>7</sup> In addition, intellectual property owners are limited under the laws of most countries as to the terms and conditions that they can impose on their

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<sup>5</sup> Compulsory licensing refers to the practice whereby governments grant to someone other than the intellectual property owner the right to use the intellectual property in question in return for a royalty payment.

<sup>6</sup> There is currently a lively debate, as well as several court cases, with respect to the patentability of living things in the USA.

<sup>7</sup> For example, the 'fair use' doctrine provides for copying for purposes of scholarly research that would otherwise be an infringement of copyright.

<sup>1</sup> The views expressed by the author are his own and are not necessarily those of the Government of Canada.

<sup>2</sup> These rights include patents, copyrights, trademarks, geographical indications, neighbouring rights, integrated circuits, industrial designs and trade secrets.

<sup>3</sup> It has long been recognised in the scholarly literature [Nordhaus 1969] that there is an optimal life for an intellectual property right. The trade-off involves the social benefits of making inventions and creative works freely available to all once they have been developed, on the one hand, and on the other providing sufficient protection of intellectual property rights to ensure that new inventions and creative works will indeed take place.

<sup>4</sup> For example, the protection provided under the original United States copyright law was granted only to books, charts and maps and was not extended to works of foreign origin. In Japan, product as against process patents were not in place until 1976.

customers, agents or licensees. For example, national competition law often limits the ability of rights owners to engage in business practices such as tied selling, exclusive dealing, territorial restrictions and resale price maintenance.

The granting of the intellectual property right together with all the limitations on the duration and scope of the intellectual property originator's exclusive ownership — the intellectual property bargain between the intellectual property owner and user — varies amongst both developed and developing countries and has varied within individual countries over time. Those who have advocated the strengthening of these rights have based their case on the effectiveness of intellectual property rights, both absolutely and relative to other innovation incentive schemes, in inducing additional innovation and creativity. They point to evidence that patent rights, for example, are essential to the conduct of privately-funded industrial research and development in many large and strategic industries, notably pharmaceuticals, fine chemicals, petroleum and machinery.<sup>8</sup> They also point to significant foregone revenues — and thus potential research and development — on the part of intellectual property owners in these and other industries, from weak or non-existent intellectual property standards or enforcement in the international market place.<sup>9</sup>

Those on the other hand who have questioned the scope and duration of existing intellectual property rights and have resisted their strengthening have claimed that a diminution of such rights will not reduce the value of resources devoted to innovation or creative expression to any significant degree. A particular case is made by those from smaller industrial and from developing countries that since their countries provide, at best, marginal markets for originators of intellectual property, changes in their policies will have little effect on the development of new intellectual property world-wide. From this perspective, there is a global efficiency rationale or argument for smaller countries providing less intellectual property protection than that provided for in the major world centres of innovation and creative expression. Still others argue that while diminution of intellectual property rights might well lead to an exit of

some from innovative or creative activity, this will serve to reduce duplication as well as premature and hurried innovation [see, for example, Dasgupta and Stiglitz 1980]. The overall flow of new, usable knowledge from a global perspective, it is argued, will not be reduced.

All these arguments and counter-arguments enter into the calculus of striking the appropriate intellectual property balance between the originator and the user nationally and internationally. Each outcome, in the form of various countries' national legislation and procedures and in the international intellectual property conventions, has its benefits and costs. At essence is the conundrum that if new technologies and artistic works that are encouraged by intellectual property protection and that are valuable and necessary for society's progress were to be freely available, there would be no financial incentive to produce them. National societies and the international community must find the appropriate balance.

There are therefore no absolutes with respect to what the intellectual property bargain struck within each country and amongst countries should be. Intellectual property-originating sectors within a nationaleconomy and countries whose exports comprise a large intellectual property content will tend to favour a stronger intellectual property regime. Intellectual property users within a society, as well as importers, will tend to have less interest in maintaining and strengthening the intellectual property system, which will largely serve to reward foreign inventors and artists without materially influencing the global or socially optimal pace of innovative and creative activity.

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## The Trade Question

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With increasing globalisation of the world economy, comprising increased movement of goods, services, capital, technology and know-how across national borders, the complex and continually evolving intellectual property bargain within each individual national jurisdiction has become an ever-larger issue on the international trade agenda.<sup>10</sup> The necessity of some type of international coordination or regulation with respect to intellectual property was recognised in the latter half of the nineteenth century as world commerce grew dramatically. A number of international conventions covering patents, trademarks and copyright were negotiated and signed in the late 1880s, while other conventions covering subjects such as phonograms and plant varieties were developed in the course of this century.<sup>11</sup> An international organisation to service these conventions, the World

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<sup>8</sup> Mansfield [1986] finds that, based on a sample of commercially-introduced inventions, 60 per cent of pharmaceutical inventions, 38 per cent of chemical, 25 per cent of petroleum and 17 per cent of machinery inventions would not have been developed in the absence of patent protection.

<sup>9</sup> A survey conducted in the USA suggests that in 1986, as a result of either infringement or inadequate intellectual property rights, US firms had their profits reduced by some \$755 mn and incurred additional losses in foreign royalty income in the amount of \$3.1 bn. Stern [1987] makes the point that a country which refuses as a matter of policy to pay for the innovative or creative content of imported goods and services is imposing a tax on these imports which is, in principle, the same as a tariff.

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<sup>10</sup> Trade in machinery and equipment, aircraft, electrical products, chemicals, and scientific equipment embody a high intellectual property component.

Intellectual Property Organisation (WIPO), based in Geneva, was established some 20 years ago. More recently, regional consultative and administrative arrangements and organisations have also developed, the most notable being the European Patent Office based in Munich and the Patent Cooperation Treaty.

Not all countries participating in the world trading system, however, have joined each of the international intellectual property conventions. In other cases, countries that are members of one or more of the conventions have accepted only lower levels of obligations. Further, both the conventions and WIPO have lacked enforcement and dispute settlement facilities to require member countries to discharge their obligations. As trade in goods and services embodying intellectual property has expanded, the lack of an international instrument to effectively counter abuses, including counterfeit goods and pirated services, has become a larger and larger problem in the world trading system.<sup>12</sup> One result of this lack of an effective, multilateral discipline has been the resort to unilateral and discriminatory trade action on the part of intellectual property-originating countries against those countries practising, or alleged to be practising, 'illegal' or 'unfair' measures with respect to intellectual property. Trade instruments such as US Section 301<sup>13</sup> and the so-called special and super 301<sup>14</sup> represent an unhealthy development with respect to the international trade system, one that could lead to a further decline in the effectiveness and credibility of the General Agreement on Tariffs and Trade (GATT), the collective guardian of the world's 'rules of the road' with respect to trade.

Attempts to bring trade-related intellectual property (TRIPS) more fully into the system of international trade rules began towards the end of the Tokyo Round

of global trade negotiations in the 1970s. A draft counterfeit code was developed but not agreed to at that time, while subsequent attempts continued to be made by some countries in the early 1980s to expand the GATT into rapidly evolving areas of world commerce, particularly those where it was thought that serious trade distortions were taking place. After much discussion and negotiation in the months leading up to the Punta Del Este Ministerial declaration in 1986, trade-related intellectual property became a separate item with its own negotiating group in the Uruguay Round.<sup>15</sup> The global trade talks are now in their final, intensive phase.

What has been and remains at stake is the intellectual property bargain on an international scale, with 97 participating countries with widely different economic interests and perspectives concerning both intellectual property and all the other issues on the global trade negotiations agenda involved. The principal intellectual property proponents in the Uruguay Round, countries such as the USA, the European Community and Japan where intellectual property originates and finds its way into a substantial share of their exports, have in essence sought better domestic coverage and enforcement of intellectual property laws in all countries, developed and developing. They have based their positions both on natural justice and, more importantly in the trade context, on the argument that inadequate intellectual property standards and enforcement can provide an unfair trade advantage to exporters from such countries. The adversely affected party, they suggest, should thus be permitted under internationally-accepted rules to take retaliatory trade action against these unfair traders as is the case with respect to other unfair practices.

For those countries that are primarily users and importers of intellectual property, the issue involving trade-related intellectual property in the Uruguay Round is whether they will be better off negotiating a multilateral trade agreement to provide a legal framework for such arrangements within the GATT, in the hope that this will achieve a better outcome for them in terms of open markets, access to technology, and their investment environment and for the world trading system more generally than would be achieved by bilateral actions and arrangements, or whether by agreeing to bring intellectual property issues into the GATT they risk even more pressure being brought against them. Since there are no absolutes involved with respect to intellectual property regimes, and a variety of interests and objectives in the Round in all areas under negotiation, the outcome will depend at

<sup>15</sup> The stated objective of the Uruguay Round negotiations on TRIPS agreed to by all Ministers at the Punta del Este opening session in September, 1986 is to develop a common set of rules and disciplines which will provide adequate and effective protection for intellectual property rights, while ensuring that these rights do not disrupt legitimate trade.

<sup>11</sup> For example, the Paris Convention for the Protection of Industrial Property [1883], the Berne Convention for the Protection of Literary and Artistic Works [1886], the International Convention for the Protection of Performers, Producers of Phonograms, and Broadcasting Organisations [1961], and the International Convention for the Protection of New Varieties of Plants [1961].

<sup>12</sup> The conventions are largely silent with respect to international trade *per se*. Yet intellectual property rights granted by national governments have historically included the right to prohibit imports from infringing sources. To the extent that the definition of infringement varies from country to country (i.e. whether or not copyright protection applies not only to blueprints but also to the objects depicted in them, or whether or not the parallel importation of goods covered either by a patent or a trademark is permitted), trade patterns can be distorted.

<sup>13</sup> Section 301 of the Trade Act of 1974 as amended in 1984 characterises the lack of intellectual property protection as an unfair trade practice, and therefore subject to trade retaliatory measures.

<sup>14</sup> The United States Trade Representative (USTR) is required to identify 'priority' countries that do not provide adequate protection to USA holders of intellectual property rights, or fair access USA exporters who rely on intellectual property protection. The USTR is required to investigate all such cases that it identifies, and within six months to determine whether action is necessary. If this is the case, actions are required within 30 days.

the end of the day on hard judgments concerning both national and international interests.

Among the many elements that will have a bearing on the outcome of the Uruguay Round in this area, four might be particularly important. One will be the strength of the demand for improvements in the world's intellectual property regime under the auspices of the GATT. The interests at stake for the demandeurs in the Uruguay Round are broad and include agriculture, access with respect to high technology products, and the liberalisation of services. Their interests with respect to intellectual property, on the other hand, are concentrated in a few, albeit major, industries<sup>16</sup> which will have to be assessed in the larger national interest of each of these countries.

Second, demandeurs will have to assess whether achieving their objectives with respect to intellectual property in other ways, particularly through bilateral negotiations, is a preferred alternative. From the standpoint of inducing other countries to strengthen intellectual property rights, the bilateral approach appears in recent years to have been a highly effective approach from the demandeurs' perspective [see US General Accounting Office 1987]. The danger in this approach, however, is that it can undermine the credibility and effectiveness of the entire multilateral rules-based trading system, and tend to impose on other countries the intellectual property bargain that has been struck in the demandeur's country.

Third, since the GATT system is essentially a bargaining framework, the determination of what constitutes adequate protection and enforcement of intellectual property will depend in the end on self-interested bargaining motivated by the promise of mutual gain to be shared among originators and users and among net exporters and net importers of intellectual property. As countries examine their actual or potential export possibilities involving intellectual property, as well as other areas such as textiles or tropical products where progress might well be made as part of an overall Uruguay Round outcome, many, if not all, will find that a common set of rules and disciplines that will provide such protection while not distorting trade is very much in their longer-term economic development and trade interests. Negotiations, particularly in the 'new' issue areas, involve a high degree of learning.

Fourthly, whether the central GATT principles of national treatment, non-discrimination, transparency and dispute settlement can be successfully brought to bear on so complex an issue in the time available to negotiate will also influence the nature and scope of the Uruguay Round outcome in this area. National

treatment in the intellectual property context, for example, applies to persons; the same principle in the international trade context applies to goods. This principle and the others will have to be reconciled and made operational without a great deal of precedent for negotiators to fall back on. While much experience was gained in the Canada-USA free trade negotiations in this area during 1986-87, for example, all that was negotiable at the end of the day was a commitment to seek to develop multilateral solutions in the Uruguay Round.<sup>17</sup>

## Conclusion

Reaching an international consensus on an acceptable and appropriate intellectual property bargain in the light of continually-evolving domestic and international perspectives reflected in the laws, procedures and practices involving intellectual property of all the countries participating in the Uruguay Round will be difficult for all the reasons noted above. As in the case of other areas of negotiation where significant international differences exist, a successful outcome of the current global trade talks will ensure that effective multilateral disciplines, reflecting varying national interests and perspectives, will have been brought to bear on this complex subject where the underlying policy conflict is so profound.

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<sup>17</sup>The approach used in the FTA negotiations to address the standards issue suggests that GATT involvement in TRIPS should not be seen by any country as a threat to WIPO or to other international institutions dealing with intellectual property matters. What is also clear from the FTA experience is that any GATT agreement must bear directly on the problems related to the way that Section 337, under which the USA International Trade Commission is permitted to provide relief from unfair trade practices, and which has recently been found by a GATT panel to be in violation of the GATT national treatment principle, is used to deal with cases of alleged infringements of intellectual property. It will also have to deal with those unilateralist features of section 301 which currently substitute for a more orderly multilateral dispute resolution mechanism.

## References

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<sup>16</sup>The pressures for actions to be taken internationally are most heavily concentrated in the pharmaceutical, chemical, computer, software, entertainment, and telecommunications sectors.