During the Uruguay Round of multilateral trade negotiations, I worked at the Finnish Ministry of Education and Culture, where my main responsibilities included copyright law and policy. I participated in coordination of the Nordic countries (Finland, Iceland, Norway and Sweden) in the capitals and represented the Nordic countries in the later stages of the TRIPS negotiations in Geneva. During the same period, I was also actively involved in WIPO’s work on copyright and the protection of layout-designs of integrated circuits, and also contributed to the intergovernmental work under various other international and European fora, such as the International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (Rome Convention). Since January 1995, I have served at the WTO Secretariat, IP Division.

I have written this chapter partly as the recollections of a representative of the Nordic countries during the negotiations. But I have also tried to take some distance and share some personal reflections on how I saw these negotiations in the area of copyright in the broader context of the development of international copyright law, in particular, the ongoing convergence of the civil law authors’ rights and common law copyright traditions. I have, therefore, chosen to focus on certain selected issues that related to the philosophical differences between these two traditions, and which turned out to be difficult to resolve.

Finally, I have added some personal observations on how the international IP law had evolved, since the 1970s, in respect of two new areas of information technology, namely, computer software and layout-designs of integrated circuits, and how this evolution influenced the way these issues were addressed in the TRIPS negotiations.
Broader negotiation dynamics

During the Uruguay Round of negotiations under the GATT, the Nordic countries coordinated closely their positions and shared representation in various negotiating groups. This enabled them to effectively pool together their expertise and other resources, and increase their bargaining power. As small countries dependent on foreign trade, they shared an interest in the maintenance and further development of a well-functioning, rules-based international trading system. This included adequate rules on IPRs and their enforcement, based on the recognition that distortions to international trade could result from an inappropriate level of protection, “be it inadequate or excessive”.

In the area of copyright, the Nordic countries, together with other industrialized countries, sought to reinforce the application of the pre-existing international standards as contained in the Berne Convention for the Protection of Literary and Artistic Works through their wider acceptance and rules concerning domestic enforcement. They shared the view that the latest act of the Berne Convention, the Paris Act of 1971, already adequately dealt with most of the key issues, such as the definition of protectable subject matter, minimum rights, permissible exceptions and the term of protection.

Beyond the readiness to build on this pre-existing level of protection, most of the substantive differences on copyright matters arose between the two copyright systems in the world, the civil law tradition of authors’ rights and the US and British Commonwealth common law tradition of copyright. These differences were essentially perceived as North–North problems.

Although cross-cutting differences between industrialized and developing countries on issues such as the proper forum for substantive norms extended to the area of copyright, developing countries could agree to the Paris Act of 1971 as an appropriate standard for international copyright protection. Many of them had long traditions in copyright protection, including Argentina, Brazil, India and Mexico. In fact, of the 77 parties to the Berne Convention in 1986, some 42 could be classified by today’s standards as developing countries. North–South divisions appeared mostly in regard to certain Berne-plus proposals, in particular whether computer programs should be protected as “literary works”, which implied the full 50-year term of protection, or whether and to what extent exclusive rental rights were justified. But even in that regard, the picture was mixed: India had already provided protection to computer programs as literary works since 1983 and, with its flourishing film industry, was in favour of exclusive rental rights in respect of...
films, and opposed to the eventually successful US proposal to make that right subject to the so-called “impairment test”.\textsuperscript{5}

That the area of copyright was less contentious between the North and the South was further evidenced by the adoption of two important new treaties on copyright matters, under the auspices of WIPO, in December 1996, less than two years after the entry into force of the Marrakesh Agreement Establishing the WTO (WTO Agreement). The principal purpose of these “Internet treaties” – the WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT) – was to adapt international rules for the protection of copyright and the rights of performers and producers of sound recordings to the digital revolution, in particular, the distribution of copyright material over the Internet. They are self-standing treaties, which build on the TRIPS Agreement (which, in its turn, had built on the Berne Convention and, to a certain extent, the Rome Convention). The successful conclusion of the negotiations among some 130 countries on these two treaties showed that WIPO was able to build on the TRIPS Agreement in a way similar to that in which the TRIPS Agreement had built on the earlier WIPO Conventions. The majority of the 51 signatories of the WCT and the 50 signatories of the WPPT were either developing countries or economies in transition from a centrally planned to a market economy.\textsuperscript{6}

In the negotiations leading up to the adoption of the Internet treaties, the tensions between the civil law and common law traditions that had been evident in the TRIPS negotiations had been eclipsed by the struggle between content providers (such as the film and music industries, keen to protect their rights) and service providers (i.e. those who transmit content over the Internet, worried about possible liability for their carriage of infringing material). This reflected the rapidly changing technological and commercial environment. Individual countries, both developed and developing, sought to align their positions in respect of these new realities.

**Bridging the historical divide between civil law and common law traditions**

Let me return to the philosophical differences that played an important role in defining the above-mentioned North–North issues during the TRIPS negotiations. Within the civil law system, the policy rationale for authors’ rights has traditionally been rooted in the twin notions of justice – authors of literary and artistic works deserve to have their economic and moral interests protected as a matter of justice – and the broader benefit to the society at large. Copyright legislation was also seen as a tool for cultural policy. Therefore, among some European policy makers
and scholars, there was a degree of discomfort with the common law system's predominant focus on the utilitarian rationale of providing incentives for copyright industries, and treating copyright as a general system of market regulation.

On the occasion of the centenary of the Berne Convention in 1986, the Assembly of the Berne Union reasserted these twin claims by “solemnly declar[ing] … that copyright is based on human rights and justice and that authors, as creators of beauty, entertainment and learning, deserve that their rights be recognised and effectively protected both in their own country and in all other countries of the world", and “that the law of copyright has enriched and will continue to enrich mankind by encouraging intellectual creativity and by serving as an incentive for the dissemination throughout the world of expressions of the arts, learning and information for the benefit of all people”.

Against this background, some European policy makers felt that the emphasis of the utilitarian objectives in the draft TRIPS Agreement, as eventually expressed in its Article 7, was difficult to reconcile with the Berne Convention's author-centric approach, built on the notion of natural justice or equity.

A major step in bridging this divide was the United States' accession to the Berne Convention in 1988, effective on 1 March 1989. Until then, US international copyright relations had primarily been governed under the 1952 Universal Copyright Convention. The move was strongly supported by US software, film and other copyright industries, which underlined their increasing share of US exports. This also strengthened the United States' efforts to include copyright and other IPRs in the ongoing Uruguay Round negotiations, and made it possible for it to reach agreement with other GATT parties to take the Paris Act of 1971 of the Berne Convention as the point of departure for copyright negotiations.

From a philosophical perspective, the United States had thus moved half-way across the ocean towards the European position. In the meantime, the Europeans had been moving closer to the US thinking with their new emphasis on the economic importance of copyright-related industries as a proper justification for protection. As regards the Nordic countries, a Swedish study published in 1982 had found that the economic contribution of copyright-related industries amounted to 6.6 per cent of Sweden's gross domestic product (GDP). A study published in Finland in 1988 had indicated that the contribution amounted to 3.5 per cent of Finnish GDP in 1981 and 3.98 per cent in 1985. In introducing that study, Jukka Liedes of the Finnish Ministry of Education and Culture noted that there was an ongoing shift from the production of and trade in tangible goods to the production
of and trade in services and immaterial commodities, which emphasized the importance of know-how *per se*, and its importance for competitiveness.\(^\text{10}\)

During this period, similar studies were also published in Canada (1977), the United States (1984), the United Kingdom (1985), the Netherlands (1986), Germany (1988) and Austria (1988). These studies concluded that the contribution of copyright-related industries was from 2 to 3 per cent of the GDP. Although the methodologies used in the studies varied and, at best, only gave indications of the order of magnitude, they created a new awareness among policy makers about the importance of copyright law and helped to put it front and centre on the international trade agenda.\(^\text{11}\)

**Practical challenges**

Although the TRIPS negotiators across this divide approached their shared interest in strengthening the international protection of copyright in a pragmatic manner, these underlying differences in philosophy and tradition resulted in a number of intractable problems that were eventually left to the Chair of the TRIPS Negotiating Group, Ambassador Lars Anell, to resolve. These differences included two interrelated sets of questions: the first was the treatment of moral rights, and the second concerned initial ownership of copyright, transfer of rights and related elements of the distribution of collective remunerations.

From the European perspective, the authors’ rights system stood on two pillars, the authors’ economic and moral rights, the latter being the right to claim authorship and to object to any derogatory action in relation to a work prejudicial to the author’s honour or reputation, as recognized in Article 6bis of the Berne Convention. The Nordic countries and the European Communities (EC), therefore, wished to include moral rights along with economic rights in the future TRIPS Agreement. In the meantime, in adhering to the Berne Convention in 1988, the United States had taken the view that the protection available under its statutory and common law already provided an adequate equivalent to the Berne Article 6bis rights, without a need for a further amendment of the US Copyright Act. The United States objected to the inclusion of moral rights in the TRIPS Agreement on the grounds that they were not “trade-related”.

Under the civil law tradition, the original owner of copyright is normally the natural person who creates the work; an employer can only acquire the rights by means of contractual arrangements. Some laws, furthermore, contained extensive regulations on copyright contracts, including on the inalienability of moral rights
and, in some cases, certain economic rights. Under the common law tradition, including the US "work for hire" doctrine, the rights in a work created in the course of employment may initially be vested in the employer, and there are few regulations on transfer of rights. It should be noted, though, that, in this respect, the gap between the two traditions was already narrowing as a number of civil law jurisdictions had amended their copyright laws, or were contemplating doing so, to the effect that the rights in respect of computer programs created in the course of employment could be considered or presumed to have been transferred to the employer.

These differences raised difficult questions concerning the law applicable to the determination of authorship and the validity of contractual arrangements that did not comply with the requirements of the country where protection was claimed. The United States, therefore, sought specific rules that, in general, would have leaned towards applying the law of the country of origin to the initial ownership of and contractual relations in respect of works, while the Nordic countries and the EC preferred to maintain the pre-existing provisions of the Berne Convention and the generally applicable rules of private international law.

The Nordic countries and a number of others had introduced blank tape levies, at that time mostly applied on audiocassette tapes (c-cassettes) and videotapes, to compensate widespread private copying of music and films. The legal characterization of these levies varied from proper copyright fees to taxes or the mixture thereof, and such characterizations were sometimes challenged in domestic courts. In some countries, a part of the collected revenue was distributed to right holders while another part was reserved for common cultural purposes. The use of c-cassettes and videotapes had already started to decline as a support for media content in the late 1980s, with the introduction of compact discs (CDs) and, a few years later, of DVDs. A number of European countries had also introduced, or were introducing, collective remunerations for holders of copyright and certain neighbouring rights for uses such as commercial rental of films, another form of exploitation that has since declined as a result of changes in technology and markets. The United States sought provisions that would have clarified how the international law should apply to these schemes, including the treatment of contractual arrangements, neighbouring rights and revenue reserved for common cultural purposes. Again, the Europeans preferred to apply the cross-cutting provisions of the TRIPS Agreement, including the provisions of the Berne Convention, to be incorporated into the Agreement.
Resolution and subsequent developments

While almost all of the copyright provisions in the so-called Dunkel Draft (the Draft Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations) were agreed in the negotiations, negotiators failed to reach agreement on these two sets of issues concerning moral rights and contractual arrangements, thus leaving their resolution to the Chair of the Negotiating Group. In his attempt to read the delegations’ offensive and defensive red lines, Ambassador Anell chose not to include either the protection of moral rights or the proposed texts relating to the second set of issues in the consolidated text of the agreement that was published as part of the Draft Final Act on 20 December 1991.12

As it turned out, the TRIPS negotiations were largely over with the publication of the Dunkel Draft. Some further attempts to reopen the second set of issues were made after the circulation of that draft. Eventually, only two changes were made to the TRIPS provisions between the 1991 Draft Final Act and the 1993 Final Act: first, to introduce a text on the moratorium on so-called non-violation complaints in dispute settlement cases (Articles 64.2 and 64.3); and, second, to limit the scope of compulsory licensing of semi-conductor technology (Article 31(c)).

The practical consequence of the exclusion of moral rights from the scope of the Agreement meant that such rights could not be enforced under the WTO dispute settlement system. In my view, the fact that the Agreement did not broaden or strengthen the application of moral rights obligations was, however, not intended to affect moral rights obligations that countries already had under the Berne Convention. This was made clear in Article 2.2 of the Agreement, which contains a safeguard clause. It provides that the provisions of the TRIPS Agreement cannot be understood to derogate from the existing obligations that countries may have to each other under the Berne Convention.

In fact, the international protection of moral rights was reaffirmed soon after the conclusion of the TRIPS Agreement by their inclusion by reference in Article 1.4 of the WCT, in December 1996. The preparatory works of the WCT indicate that this was “because the [proposed] Treaty is not limited to trade-related aspects of copyright”.13 At the same time, the protection of moral rights was extended to cover performers in respect of their musical performances or, more precisely, “live aural performances or performances fixed in phonograms” in Article 5 of the WPPT. In June 2012, Article 5 of the Beijing Treaty on Audiovisual Performances further
extended moral rights to actors or, more precisely, to performers “as regards [their] live performances or performances fixed in audiovisual fixations”.

The differences concerning original ownership, contractual arrangements and applicable law resurfaced soon after the conclusion of the TRIPS Agreement in WIPO’s work aimed at improving the protection of actors’ rights in respect of their performances on audiovisual fixations. As I will discuss later, a solution was not found until 2011, which allowed the conclusion of the Beijing Treaty in June 2012.

More broadly, as mentioned above, the TRIPS negotiators approached their shared interest in strengthening the international protection of copyright in a pragmatic manner. Certain issues that, to a large extent, arose from the differences between the authors’ rights and copyright traditions were, in the end, not specifically addressed in the text of the Agreement but left to the pre-existing public and private international law.

As a result, the final text of the TRIPS Agreement can be considered as being strictly neutral as between the two main legal traditions. In that sense, the negotiators succeeded in reinforcing the protection under both these traditions, and the conceptual starting points under the two traditions remain complementary rather than mutually exclusive. Reflecting this broad approach, a WTO panel in US – Copyright Act noted in 2000 that “the Berne Convention and the TRIPS Agreement form the overall framework for multilateral protection”, and that “it is a general principle of interpretation to adopt the meaning that reconciles the texts of different treaties and avoids a conflict between them”.

As mentioned above, within the civil law tradition, copyright legislation was often seen, *inter alia*, as a tool for cultural policy. Arguably, cultural objectives have always been an element underlying the multilateral copyright law under the Berne Convention. Although the only pre-existing explicit reference to such objectives in the text of the Berne Convention can be found in its Appendix, the preparatory works of the Convention discuss the impact of copyright on cultural activities. It is worth noting that, apart from the Berne Appendix, cultural objectives found their first explicit recognition in the form of treaty text in the 1996 WCT, which recognizes in its Preamble “the need to introduce new international rules and clarify the interpretation of certain existing rules in order to provide adequate solutions to the questions raised by new economic, social, cultural and technological developments” (emphasis added). Similar provisions were included in the preambles of the 1996 WPPT and the 2012 Beijing Treaty.
Related rights

One of the major differences between the civil law and common law systems is their approach to the protection of rights neighbouring copyright, in particular the protection of performers, producers of phonograms (or sound recordings) and broadcasting organizations. Finding common ground on how to treat their protection was bound to be a challenging task for the negotiators.

From early on, the United States sought strong protection for sound recordings, including exclusive reproduction and rental rights. Under the US Copyright Act, sound recordings are considered as subject matter of copyright, that is, a category of works of authorship. Under the civil law tradition, producers of phonograms enjoy a separate “neighbouring right”, which is on par with similar neighbouring rights of performers and broadcasting organizations. The Nordic countries and the EC, therefore, wished to see all of the three categories of right holders covered by the new agreement.

These three categories of neighbouring rights benefited from international protection under the Rome Convention. The membership of that Convention was, however, mostly limited to countries from the civil law tradition, and amounted, at the time of the negotiations, to only 34 parties (by the end of 1990). Therefore, there was no general agreement at the global level on the merits of protecting these categories through special rights.

This explains why the negotiators chose an approach to the Rome Convention that differs from that to the Berne Convention, as well as to the Paris Convention and the Treaty on Intellectual Property in Respect of Integrated Circuits (IPIC or Washington Treaty). The TRIPS Agreement does not contain any general obligation to comply with the provisions of the Rome Convention, although there are direct references to certain provisions of the Convention that determine, for example, the criteria for eligibility for protection and permissible conditions, limitations and exceptions. The level of protection is, in certain respects, higher but, in some other respects, lower than that under the Rome Convention. The safeguard clause of Article 2.2, however, applies also to related rights. Thus, nothing in the TRIPS Agreement may be interpreted as derogating from the existing obligations that WTO members also parties to the Rome Convention may have to each other under the Rome Convention. Furthermore, the negotiators chose to use a neutral term, “related rights”, rather than the term “neighbouring rights” associated with the civil law tradition to refer to these categories.
The United States was successful in securing strong protection for sound recordings, in particular, exclusive reproduction and rental rights for phonogram producers. At Japan’s suggestion, the latter, however, became subject to a grandfather clause, allowing its substitution with a system of equitable remuneration under certain circumstances.

As mentioned above, in my view, the TRIPS Agreement can be considered as being strictly neutral as between the two main legal traditions. This is also reflected in the way it addresses the protection of producers of phonograms. It simply defines the kind of protection that has to be available for producers. The obligations can be complied with by granting either copyright or neighbouring rights to them. Even here, the Agreement bridges the two approaches.

The EC, in turn, secured the inclusion of the protection of performers and broadcasting organizations in the Agreement. The final text provides that performers must have the possibility of preventing the unauthorized fixation of their performance on a phonogram and certain other acts. The wording used in the relevant provision, “possibility of preventing the following acts when taken without their authorization”, follows that of the Rome Convention. In the latter context, it has been understood to leave freedom of choice to members as to the means used to implement the obligation. These include granting of an exclusive right or law of employment, of unfair competition or criminal law. Although, from the European perspective, the level of protection achieved under these provisions was modest, the provisions established, for the first time, a truly multilateral recognition that performers should benefit from international IP protection.

In respect of broadcasting organizations, the Agreement provides that they shall have the right to prohibit the unauthorized fixation, the reproduction of fixations, and the rebroadcasting by wireless means of broadcasts, as well as the communication to the public of their television broadcasts. To accommodate common law jurisdictions that do not provide special related rights to broadcasting organizations, it was agreed that it is not necessary to grant such rights to broadcasting organizations, if owners of copyright in the subject matter of broadcasts are provided with the possibility of preventing these acts, subject to the provisions of the Berne Convention. While these provisions are also flexible, and take into account the differences between the two main legal traditions, they bridge the two approaches.

Unlike in other areas of IPRs covered by the Agreement, the minimum level of protection provided to related rights was set at a relatively modest level. This was
due to the lack of broader agreement about the need for special related rights. The provisions, therefore, left substantial differences in the level of protection granted under the laws of different countries. The Nordic countries were concerned that major differences in the level of protection, coupled with full national and most-favoured-nation (MFN) treatment, would make it politically difficult to further develop the protection of neighbouring rights; the resulting imbalances might even risk the maintenance of the current levels of protection in those countries where such rights were very advanced. The EC shared this concern.

It was noted that Article 2.2 of the Rome Convention already had a narrower formulation of the national treatment of neighbouring rights. Together with the other conditions of the Rome Convention, this would also be applicable under the draft TRIPS provisions. The Nordic countries and the EC, however, wished to clarify the legal situation. This was not objected to by other delegations, although some questioned whether it was necessary. Eventually, agreement was reached to clarify the national and MFN treatment clauses of the TRIPS Agreement by excluding from their coverage those rights of performers, producers of phonograms and broadcasters that were not provided under the TRIPS Agreement.

After the circulation of the Dunkel Draft, there were some attempts to reopen the scope of non-discrimination rules concerning related rights and, to some extent, copyright. But, as mentioned above, in the end, no further changes were made to the copyright section between the 1991 Draft Final Act and the 1993 Final Act. In subsequent treaties on related rights, the national treatment obligations were formulated in a similar manner, namely, in Article 4(1) of the 1996 WPPT and Article 4(1) of the 2012 Beijing Treaty.

As it turned out, the inclusion of the related rights in the TRIPS Agreement provided impetus for the further development of international protection of related rights, leading to the adoption of the WPPT in December 1996. Building on the provisions of the TRIPS Agreement, the WPPT provides enhanced protection for the rights of performers and producers of sound recordings. Among important improvements was that, under the WPPT, performers were provided an “exclusive right of authorizing” certain acts in regard to their performances, rather than the mere “possibility of preventing” those acts.

The WPPT did not cover the rights of performers in audiovisual fixations of their performances. While many delegations were in favour of extending the application
of its provisions to actors’ rights in relation to films and other audiovisual productions, some others were not yet willing to go that far. The WIPO Diplomatic Conference of December 1996 adopted a resolution calling for further work. Questions relating to initial ownership, contractual arrangements and applicable law resurfaced in this work. This led to the Diplomatic Conference of December 2000 that reached a provisional agreement on 19 of 20 substantive articles. The two leading film producers from common law jurisdictions, India and the United States, favoured strong copyright protection for their film industries but wished to ensure that the contractual relationships between their producers and actors would be internationally recognized. While in favour of improving actors’ protection, European governments and performers resented the prospect of the new rights provided under the Treaty to actors being in practice enjoyed by producers.

The remaining provision on the transfer of rights was finally settled by the WIPO Standing Committee on Copyright and Related Rights at its June 2011 meeting. It, *inter alia*, allows a contracting party to provide in its national law that, once a performer has consented to fixation of his or her performance in an audiovisual fixation, the exclusive rights are owned or exercised by or transferred to the producer; independent of such transfer of exclusive rights, national laws or individual, collective or other agreements may provide the performer with the right to receive royalties or equitable remuneration for any use of the performance. 19 This compromise took into account the different rules and practices that countries applied at that time. It enabled the adoption of the Beijing Treaty in June 2012.

Contrary to the TRIPS Agreement and the Rome Convention, the WPPT does not cover the protection of broadcasting organizations. In response to a request by the Philippines, which had been concerned about the earlier exclusion of the rights of broadcasting organizations from the mandate for the preparatory work of the WPPT, an international forum was held in April 1997 in the Philippines, where these rights were discussed. The issue was put on the agenda of the newly formed WIPO Standing Committee on Copyright and Related Rights in November 1999; it is continuing its discussions on a potential treaty that would update the international norms relating to the rights of broadcasting organizations in the light of technological developments.

**Computer programs and layout-designs of integrated circuits**

In the 1970s, the international community was faced with two new types of information technology products that seemed to need IP protection: computer software and layout-designs of integrated circuits. There are many similarities
between the two: both are functional products that involve incremental technological innovation and direct the operation of a machine. They are constructed by using either text or three-dimensional designs, which could be conceived as protectable works falling under the notion of a “production in the literary, scientific and artistic domain”.20

In both cases, discussions at WIPO and in other international fora initially focused on new *sui generis* forms of protection, although copyright and patent protection were also explored. The approaches, however, gradually diverged as copyright became the preferred form of protection for computer software while *sui generis* laws were applied to layout-designs. This had important implications on certain aspects of the substantive protection of these two categories, in particular, the term of protection. Developments at the domestic level, particularly in the United States, influenced the direction of the multilateral work.

This evolution of international IP law, including the previous and, to some extent, parallel work done at WIPO, became the point of departure for how these issues were addressed and eventually resolved in the TRIPS negotiations.

During that period, the protection of computer programs and layout-designs of integrated circuits also came up in the Nordic cooperation to revise Nordic copyright laws. Following the broader international developments, both issues were initially taken up in the context of this cooperation in the area of copyright, but the *sui generis* approach was soon selected for layout-designs.

**Computer programs**

Work at WIPO on computer software initially started under the auspices of the Paris Union for the Protection of Industrial Property. This work resulted in 1978 *Model Provisions on the Protection of Computer Software*,21 prepared by the International Bureau of WIPO with the assistance of experts. The Model Provisions followed a *sui generis* approach, although they built on copyright concepts. They provided for a term of protection of 20 years from the first use or sale, but not more than 25 years from the creation.

In the further work, the focus gradually shifted towards the copyright approach in the protection of computer software. The then Assistant Director-General of WIPO, Mihály Ficsor, identifies the critical shift in thinking as occurring in the mid-1980s, explaining that the 1985 meeting of the Group of Experts on the Copyright Aspects of the Protection of Computer Software, jointly convened by WIPO and the United Nations Educational, Scientific and Cultural Organization (UNESCO),
“produced a breakthrough towards the general recognition of computer programs as works to be protected under the Berne Convention (and the UCC)”.22

In the meantime, there was an ongoing trend towards the copyright approach at the domestic level. A working document prepared for the aforementioned meeting showed that five countries had already explicitly covered computer programs under their domestic copyright laws (in chronological order, the Philippines, the United States, Hungary, Australia and India) and, in some other countries, this had resulted from court decisions.23 A number of other countries soon followed suit.

The prime motivation of the proponents of this approach appeared to be that, if computer programs were to be considered as works, they would automatically benefit from the international protection already available under the pre-existing conventions. Or, as two leading scholars of international copyright law, Sam Ricketson and Jane Ginsburg, have put it, “copyright protection provided a ready pigeon-hole into which software could be slotted with a minimum of trouble”.24

By the late 1980s, the most contentious remaining issue at WIPO was less whether computer programs should be protected under copyright than whether they should be considered as literary works. The main implication was that their recognition specifically as “literary” works would mean that the general term of 50 years post mortem auctoris (after an author’s death) would become applicable, excluding the 25-year term from the making applicable to works of applied art.25 For example, the summary record of a 1989 meeting of a WIPO Committee of Experts indicates that some delegations argued that “the 50-year term of protection after the authors’ [sic] death is unrealistic”. The proponents responded that “[t]he alleged problem of the long term of protection is of an academic nature; there are a number of other categories of literary and artistic works which may become obsolete within a much shorter period than 50 years after the authors’[sic] death which should be considered nothing else but an upper limit”.26

In the TRIPS negotiations, the United States sought from the outset the protection of computer programs as literary works.27 The EC initially took the view that “the term of protection of computer programs shall in no event be shorter than the minimum term provided for in the Berne Convention for certain categories of works, i.e. 25 years from the date of creation”.28 Later on, its position shifted to support the view that computer programs should be protected as literary works.29 This was also the approach favoured by the Nordic countries. Many developing countries advocated for a shorter term of protection, such as 25 years from the creation. The text submitted by 14 developing countries suggested leaving “the
nature, scope and term of protection to be granted to such works" to domestic law.\textsuperscript{30}

Eventually, agreement was reached on the present Article 10.1, which provides that computer programs, whether in source or object code, shall be protected as literary works under the Berne Convention (1971). This agreement was subsequently reconfirmed in Article 4 of the 1996 WCT.

During the negotiations, Japan proposed to clarify the scope of protection by specifically excluding programming languages and algorithms used for making such works.\textsuperscript{31} It was, however, recognized that this already would follow from the idea/expression dichotomy that was understood to apply to all categories of works under the Berne Convention.\textsuperscript{32} It was, therefore, agreed to include this as a general principle in Article 9.2, which confirms that copyright protection shall extend to expressions and not to ideas, procedures, methods of operation or mathematical concepts as such. A similar wording was subsequently included in Article 2 of the 1996 WCT.

\textit{Layout-designs of integrated circuits}

As mentioned earlier, the international work on the protection of layout-designs of integrated circuits steadily moved towards a \textit{sui generis} solution. This was influenced by the domestic developments in the United States and Japan, the two leading producers at that time.

After initially considering protecting layout-designs (or “mask works") by incorporating them into copyright law,\textsuperscript{33} in 1984, the US Congress passed a Semiconductor Chip Protection Act opting for a \textit{sui generis} approach. Protection was made available to foreign right holders on the basis of reciprocity. Japan passed an Act Concerning the Circuit Layout of a Semiconductor Integrated Circuit in 1985, which also adopted a \textit{sui generis} approach. In 1986, the EC adopted a Directive on the Legal Protection of Topographies of Semiconductor Products based on a similar approach.

These domestic developments gave impetus to the development of multilateral norms at WIPO. It set up an expert committee to consider a possible treaty in respect of integrated circuits. In response to a question raised at its first meeting in 1985 concerning the relationship between the draft treaty and the pre-existing copyright conventions, the then WIPO Director-General Árpád Bogsch observed that “[i]t is believed that neither the Berne Convention nor the Universal Copyright Convention requires a State party to it to consider layout-designs of integrated
circuits as works, in the sense that that word is used in copyright law, and to protect them as works under their copyright legislation or under the Berne Convention or the Universal Copyright Convention". Later on, he elaborated his view on both the Berne Convention and the Paris Convention by stating that “if the [domestic] regulation is made in a sui generis law, such law needs to be compatible only with the proposed Treaty”, but if such regulation treated layout-designs as works or subject matter of industrial property, they also needed to comply with the Berne and/or Paris Conventions, including the 50 years term of protection after the death of the author.

This work eventually led to the convening of a Diplomatic Conference for the adoption of the IPIC Treaty in Washington in May 1989. After three weeks of negotiations, it failed to reach agreement on a number of remaining differences, among which were the term of protection, lack of compensation in case of innocent infringement, and compulsory licensing. It adopted the IPIC Treaty only after a vote, with 48 votes in favour and five abstentions. The two biggest producers of integrated circuits, Japan and the United States, voted against. Together, they represented around 85 per cent of the global production. Some of the other industrialized countries had voted in favour to show their support for multilateralism, but remained uncomfortable with the contents of the treaty. As a result, they refrained from signing it. In the end, only eight countries signed it. Since only three countries have ratified it, the Treaty has not entered into force.

The extensive work on this highly technical matter that had gone into the negotiations of the IPIC Treaty was not wasted, however. The substantive content of the Treaty was revived as part of the TRIPS negotiations. Developing countries that had actively participated at the Washington Diplomatic Conference and in its preparations did not have difficulties in taking that Treaty as the basis for TRIPS negotiations. Japan and the United States, in turn, sought to address the issues they saw as deficiencies in the level of protection it provided. They were eventually successful in reaching agreement on texts that addressed their concerns. As a result, the TRIPS Agreement is based on an IPIC-plus approach, incorporating most of the substantive provisions of that Treaty, while including some additional obligations on the aforementioned matters.
Endnotes

1 Helpful comments received from Jukka Liedes, Adrian Otten and Jayashree Watal are gratefully acknowledged.


3 Denmark, as a member of the European Communities (EC), did not participate in this coordination. During the same period, it actively participated in the Nordic cooperation aimed at updating the Nordic countries’ copyright laws.

4 Communication by the Nordic countries circulated as GATT document MTN.GNG/NG11/W/29, Negotiating Group on Trade-Related Aspects of Intellectual Property Rights, including Trade in Counterfeit Goods – Communication by the Nordic Countries, 20 October 1988, para. 4.

5 See Article 11 of the TRIPS Agreement, second sentence.

6 The WCT and WPPT were adopted on 20 December 1996, and entered into force on 6 March 2002 and 20 May 2002, respectively.

7 The “solemn declaration” adopted by the Assembly of the Berne Union on 9 September 1986, as reproduced in *Copyright* 11 (1986): 373.


11 During this period, the EC had started its work of harmonizing the copyright laws of its member states, which also involved reconciling the continental authors’ rights system with the British common law system. Familiarity with the two systems enabled the EC to take the lead in suggesting solutions concerning enforcement of IPRs that would be compatible with both systems.


13 WIPO documents CRNR/DC/3-5, Basic Proposals for the Administrative etc. Clauses (drafted by the International Bureau), and for the Substantive Provisions of Treaty I and II (drafted by the Chairman), note 1.05.

14 US – *Copyright Act, WT/DS160/R*, para. 6.66.
15 Article I(1) of the Appendix to the Berne Convention refers to the “economic situation and [...] social and cultural needs” (emphasis added) of a developing country wishing to avail itself of the flexibilities under the Appendix.


17 Article 14.4 of the TRIPS Agreement, second sentence.


19 It was subsequently included as Article 12 in the Beijing Treaty.

20 Article 2(1) of the Berne Convention.


24 Ricketson and Ginsburg, supra note 2, p. 493.

25 Article 7(4) of the Berne Convention.


30 GATT document MTN.GNG/NG11/W/71, Negotiating Group on Trade-Related Aspects of Intellectual Property Rights, including Trade in Counterfeit Goods - Communication from Argentina, Brazil, Chile, China, Colombia, Cuba, Egypt, India, Nigeria, Peru, Tanzania and Uruguay. 14 May 1990, Chapter IV, Article 11.
31 GATT document MTN.GNG/NG11/W/74, Section I, para. 1(3)(ii).


36 Ghana, Liberia, Yugoslavia, Zambia, Guatemala, Egypt, China and India.