

Abstract

Steven Ruby is a third-year law student at the University of Oklahoma College of Law. Mr. Ruby wrote this paper for the Project on Intellectual Property Rights in Living Matter under the direction of Professor Drew Kershen. Below, Mr. Ruby discusses the provisions of the International Convention for the Protection of New Varieties of Plants (UPOV), an international treaty governing the patentability of plant varieties. The various signatory countries to this convention have adopted different amendments thereto and this eBrief outlines the basic framework within which one must work when seeking patents in these jurisdictions.

Edited by Ademuyiwa Ogunbase

**THE UPOV SYSTEM OF PROTECTION: HOW TO BRIDGE THE GAP BETWEEN
1961 AND 1991 IN REGARD TO BREEDERS' RIGHTS**

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I. Introduction

The International Union for the Protection of New Varieties of Plants (UPOV) is a body that prescribes methods of plant variety protection. UPOV came into existence with the adoption of the International Convention for the Protection of New Varieties of Plants by a Diplomatic Conference in Paris on December 2, 1961.¹ With the UPOV came recognition of the intellectual property rights of plant breeders in their varieties on an international basis.² Since 1961, several amendments to the original Convention have been passed -- specifically, the amendments of 1972, 1978, and 1991. Different countries apply different versions of the UPOV system as provided by these amendments.³ It is extremely important to understand the nuances of each when dealing with international breeders' rights.

¹ International Union for the Protection of New Plant Varieties, *The UPOV System of Plant Variety Protection*, at http://www.upov.int/en/about/upov_system.htm (last visited Mar. 24, 2004) [hereinafter UPOV System].

² *Id.*

³ States that are parties to the 1991 Act include Australia, Belarus, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, Germany, Hungary, Israel, Japan, Kyrgyzstan, Latvia, Lithuania, Netherlands, Poland, Republic of Korea, Republic of Moldova, Romania, Russian Federation, Slovenia, Sweden, Tunisia, United Kingdom, and United States of America. International Union for the Protection of New Varieties of Plants, *States Party to the International Convention for the Protection of New Varieties of Plants*, <http://www.upov.int/en/about/members/index.htm> (last visited Sept. 11, 2004). Countries that remain a party to the

The 1991 Convention contains a provision addressing how relations between parties applying different versions of the Act must be conducted. Chapter IX, article 31 states that “[b]etween States members of the Union which are bound both by this Convention and any earlier Act of the Convention, only this Convention shall apply.”⁴ With respect to “possible relations with States not bound by [the 1991] Convention,” any state not bound by the 1991 Convention may, by declaration to the Secretary General, apply the latest Act by which it is bound in its relations with those countries that apply the 1991 Convention (only after one month has passed since the notification and until they adopt the 1991 Convention).⁵ It is easy to see that the language of the 1991 Convention necessitates knowledge of the differences and similarities between each treaty.

International protection of plant varieties is, without a doubt, globally beneficial. This examination of the statutory language of each version of the UPOV system focuses mainly on a few of the similarities and differences with respect to the definitions of what a plant variety is, the general obligations of the contracting parties, and the conditions for the grant of the breeders’ rights.

1961 Act include Belgium and Spain. *Id.* Countries that remain a party to the 1978 Act include Argentina, Austria, Bolivia, Brazil, Canada, Chile, China, Colombia, Ecuador, France, Ireland, Italy, Kenya, Mexico, New Zealand, Nicaragua, Norway, Panama, Paraguay, Portugal, Slovakia, South Africa, Switzerland, Trinidad and Tobago, Ukraine, and Uruguay. *Id.*

⁴ International Convention for the Protection of New Varieties of Plants, Dec. 2, 1961, 33 U.S.T. 2703, 815 U.N.T.S. 89, as Revised at Geneva on Nov. 10, 1972, on Oct. 23, 1978, and on Mar. 19, 1991, ch. IX, art. 31(1), <http://www.upov.int/en/publications/conventions/1991/pdf/act1991.pdf> (last visited Sept. 10, 2004) [hereinafter 1991 Convention].

⁵ *Id.* ch. IX, art. 31(2).

II. The Need for Protection of Plant Varieties

The expressed purpose of the 1961/1972 Convention is “to recogni[z]e and to ensure to the breeder of a new plant variety or to his successor in title, a right” to protection.⁶ This type of protection of breeders’ rights is important because “[n]ew varieties of plants which produce improved yields, higher quality or provide better resistance to plant pests and diseases are a key element and a most cost-effective factor in increasing productivity and product quality in agriculture, horticulture and forestry, whilst minimizing the pressure on the natural environment.”⁷

In addition, “[m]any other modern technologies of plant production need to be combined with high-performing varieties in order to deploy their full potential.”⁸ “The tremendous progress in agricultural productivity,” due largely to improved varieties obtained through plant breeding, not only helps increase food production, but “higher quality increases in the value and marketability of crops in the global market of the twenty-first century.”⁹

Other positive results include the fact that “breeding programs for ornamental plants can be of substantial economic importance for an exporting country,”¹⁰ and that “[t]he breeding and exploitation of new varieties is a decisive factor in improving rural income and overall economic development.”¹¹

As was stated above, “[t]he UPOV system of plant variety protection came into being with the adoption of the International Convention for the Protection of New Varieties of Plants

⁶ *UPOV Convention: 1961 Act*, available at http://www.upov.int/en/publications/conventions/1961/w_up610 .htm# 1.

⁷ UPOV System, *supra* note 1.

⁸ *Id.*

⁹ *Id.*

¹⁰ *Id.*

¹¹ *Id.*

by a Diplomatic Conference in Paris on December 2, 1961.”¹² “The UPOV Convention provides a *sui generis* form of intellectual property protection which has been specifically adapted for the process of plant breeding and has been developed with the aim of encouraging breeders to develop new varieties of plants.”¹³

III. Meaning of Plant Variety

“Farmers and growers need plants which are adapted to the environment in which they are grown and which are suited to the cultivation practices employed. Therefore, farmers and growers use a more precisely defined group of plants, selected from within a species, called a “plant variety.”¹⁴ A good example of the differences between the three Conventions is each Convention’s definitions of variety.

The original 1961 Convention defines a variety as applying to “any cultivar, clone, line, stock or hybrid which is capable of cultivation”¹⁵ and that is “sufficiently homogeneous, having regard to the particular features of its sexual reproduction or vegetative propagation,”¹⁶ as long as it is “stable in its essential characteristics, that is to say, it must remain true to its description after repeated reproduction or propagation...at the end of each cycle.”¹⁷

The 1991 Convention defines a plant variety as:

a plant grouping within a single botanical taxon of the lowest known rank, which grouping, irrespective of whether the conditions for the grant of a breeders’ right are fully met, can be

- defined by the expression of the characteristics resulting from a given genotype or combination of genotypes,

¹² *Id.*

¹³ *Id.*

¹⁴ *Id.*

¹⁵ International Convention for the Protection of New Varieties of Plants, Dec. 2, 1961, art. 2(2), 33 U.S.T. 2703, 815 U.N.T.S. 89, <http://www.upov.int/en/publications/conventions/1961/content.htm>, (last visited Sept. 10, 2004) [hereinafter 1961 Convention].

¹⁶ *Id.* art. 6(1)(c).

¹⁷ *Id.* art. 6(1)(d).

- distinguished from any other plant grouping by the expression of at least one of the said characteristics and
- considered as a unit with regard to its suitability for being propagated unchanged.¹⁸

“[A] variety must be recognizable by its characteristics, recognizably different from any other variety and remain unchanged through the process of propagation.”¹⁹ While a variety that does not meet the above criteria is not “considered to be a variety within the UPOV system,” the definition makes it clear that this is not a “condition for determining if a variety is eligible for protection” under the Convention.²⁰ The conditions for protection of a variety are set out in later provisions.²¹ This is simply an example of the progression of language that has taken place between the passage of the 1961 and 1991 treaties and a necessary piece of understanding the basics of either legislation.

IV. General Obligations of the Contracting Parties and Botanical Genera and Species to be Protected

The 1991 Convention explicitly states that “[e]ach Contracting Party²² shall grant and protect breeders’ rights.”²³ In dealing with the genera and species to be protected by the 1991 Convention, a “Contracting Party which is bound by the Act of 1961/1972 or the Act of 1978 shall apply the provisions of this [1991] Convention, [] at the date on which it becomes bound by this Convention, to all plant genera and species to which it applies, on the said date, the provisions of the Act of 1961/1972 or the Act of 1978 and, [] at the latest by the expiration of a period of five years after the said date, to all plant genera and species.”²⁴ With respect to a new

¹⁸ See 1991 Convention, *supra* note 4, ch. I, art. 1(vi).

¹⁹ UPOV System, *supra* note 1.

²⁰ *Id.*

²¹ *Id.*

²² “Contracting Party” means a State or an intergovernmental organization party to this Convention. See 1991 Convention, *supra* note 4, ch. I, art. 1(vii).

²³ *Id.* ch. II, art. 2.

²⁴ *Id.* ch. II, art. 3.

Contracting Party, they “shall apply the provisions of [the 1991] Convention...to at least 15 plant genera or species and...at the latest by the expiration off a period of 10 years from the said date, to all plant genera and species.”²⁵

While the 1991 Convention strictly applies protection for *all* genera and species, the 1961/1972 Convention is centered on protecting the genera and species provided in “the list annexed to the Convention.”²⁶ The 1961/1972 convention expresses that “[e]ach member State of the Union shall, on the entry into force of this Convention in its territory, apply the provisions of the Convention to at least five of the genera named in the list annexed to the Convention.”²⁷ It explains further that “[e]ach member state further undertakes to apply the said provisions to the other genera in the list, within the following periods from the date of the entry into force of the Convention in its territory: (a) within three years, to at least two genera; (b) within six years, to at least four genera; (c) within eight years, to all the genera named in the list.”²⁸ If the genera or species is not on the list, then the member State of the Union “shall be entitled either to limit the benefit of such protection to the nationals of member States of the Union protecting the same genus or species and to natural and legal persons resident or having their headquarters in any of those States, or to extend the benefit of such protection to the nationals of other member States of the Union...”²⁹

Article 4 of the 1978 Convention begins with the language similar to the 1961/1972 Convention by stating that, “[t]his Convention *may* be applied to all botanical genera and

²⁵ *Id.*

²⁶ *See* 1961 Convention, *supra* note 15, art. 4(3).

²⁷ *Id.*

²⁸ *Id.*

²⁹ *Id.*

species.”³⁰ Where the 1978 Convention becomes more like the 1991 Convention is in its mandatory application to “at least five genera or species,”³¹ and unlike the 1961 convention, the protection of the 1978 Convention is not limited to a list.

V. Rights Protected (Breeders’ Rights)

Generally “[t]he nature of the right provided by the UPOV Convention is such that it is an exclusive right.”³² “In other words, it only forbids others from conducting certain acts without the authorization of the breeder of the protected variety.”³³ By the same ideals however, “[t]he breeder of a protected variety will not be able to exploit the variety in any way which is contrary to a law in the territory of the member of the Union concerned.”³⁴

While the 1961/1972 and 1978 Conventions discussed the rights that they protected, which is essentially the same as breeders’ rights (even though not expressly named so), and the scope of that protection in Article 5,³⁵ the 1991 Convention expressly states that it protects breeders’ rights. The 1991 Convention’s Scope of the Breeders’ Right, which sets forth acts that require the authorization of the breeder include:

- (i) production or reproduction (multiplication),
- (ii) conditioning for the purpose of propagation,
- (iii) offering for sale,
- (iv) selling or other marketing,
- (v) exporting,
- (vi) importing,
- (vii) stocking for any of the purposes mentioned in (i) to (vi), above.³⁶

³⁰ International Convention for the Protection of New Varieties of Plants, Dec. 2, 1961, 33 U.S.T. 2703, 815 U.N.T.S. 89 at art. 4, as Revised at Geneva on Nov. 10, 1972, and on Oct. 23, 1978, <http://www.upov.int/en/publications/conventions/1978/content.htm> (last visited Sept. 10, 2004) [hereinafter 1978 Convention].

³¹ See *id.* art. 4.

³² *UPOV System*, *supra* note 1.

³³ *Id.*

³⁴ *Id.*

³⁵ See 1961 Convention, *supra* note 15, art. 5(1); see also 1978 Convention, *supra* note 30, art. 5(1).

³⁶ See 1991 Convention, *supra* note 4, ch. V, art. 14(1).

In contrast, both the 1961/1972 and 1978 Conventions include breeder's rights in a scope provision that is not as inclusive as the provision from the 1991 Convention. In the 1961/1972 Convention Article 5(1) states that "[t]he effect of the right granted to the breeder of a new plant variety or his successor in title is that his prior authorization shall be required for the production, for purposes of commercial marketing, of the reproductive or vegetative propagating material..."³⁷ Similarly the 1978 Convention requires prior authorization from the breeder for "the production for purposes of commercial marketing, the offering for sale, [and] the marketing of the reproductive or vegetative propagating material, as such, of the variety."³⁸

A. Exceptions to the Breeders' Right

Article 15 of the 1991 Convention provides explicit exceptions to the breeders' right which include:

- (i) acts done privately and for non-commercial purposes,
- (ii) acts done for experimental purposes and
- (iii) acts done for the purpose of breeding other varieties and, for the purpose of exploiting these new varieties provided the new variety is not a variety essentially derived from another protected variety (the initial variety).³⁹

Neither the 1961/1972 Convention nor the 1978 convention include a specific provision outlining exceptions to the breeders' right, but they do include in the scope of their protection "[a]uthorization by the breeder or his successor in title shall not be required either for the utilization of the new variety as an initial source of variation for the purpose of creating other new varieties or for the marketing of such varieties."⁴⁰

³⁷ See 1961 Convention, *supra* note 15, art. 5(1).

³⁸ See 1978 Convention, *supra* note 30, art. 5(1).

³⁹ See 1991 Convention, *supra* note 4, ch. V, art. 15.

⁴⁰ See 1961 Convention, *supra* note 15, art. 5(3); *see also* 1978 Convention, *supra* note 30, art. 5(3).

B. Conditions for the Grant of the Breeders' Right

In the 1991 Convention, as long as the “variety is designated by a denomination in accordance with the provisions of Article 20,⁴¹ [and] that the applicant complies with the formalities provided for by the law of the Contracting Party with whose authority the application has been filed and that he pays the required fees,” the breeder shall have his rights granted as long as the variety is:

- (i) new,⁴²
- (ii) distinct,⁴³
- (iii) uniform⁴⁴ and
- (iv) stable⁴⁵.⁴⁶

Both the 1961/1972 and 1978 Conventions, like the 1991 Convention, require that each variety meet certain formalities contained within each specific convention, as well as requiring denomination. The conditions required to obtain the grant of a breeders' right look as if they are slightly different when in reality they are very similar to the requirements in the 1991 Convention. Both the 1961/1972 and 1978 Conventions require that the “new variety must not

⁴¹ The variety's denomination must enable the variety to be identified and must be submitted by the breeder to the authority. See 1991 Convention, *supra* note 4, ch. VI, art. 20.

⁴² The variety shall be deemed to be new if, at the date of filing of the application for a breeders' right, propagating or harvested material of the variety has not been sold or otherwise disposed of to others, by or with the consent of the breeder, for purposes of exploitation of the variety.
Id. ch. III, art. 6(1).

⁴³ The variety shall be deemed to be distinct if it is clearly distinguishable from any other variety whose existence is a matter of common knowledge at the time of the filing of the application. In particular, the filing of an application for the granting of a breeders' right or for the entering of another variety in an official register of varieties, in any country, shall be deemed to render that other variety a matter of common knowledge from the date of the application, provided that the application leads to the granting of a breeders' right or to the entering of the said other variety in the official register of varieties, as the case may be.
Id. ch. III, art. 7.

⁴⁴ “The variety shall be deemed to be uniform if, subject to the variation that may be expected from the particular features of its propagation, it is sufficiently uniform in its relevant characteristics.” Id. art. 8.

⁴⁵ “The variety shall be deemed to be stable if its relevant characteristics remain unchanged after repeated propagation or, in the case of a particular cycle of propagation, at the end of each such cycle.” Id. art. 9.

⁴⁶ See id. ch. III, art. 5(1)-(2).

have been offered for sale or marketed,⁴⁷ which is very similar to the 1991 Convention’s “new[ness]” requirement.⁴⁸ Both earlier conventions require that the new variety “must be clearly distinguishable,”⁴⁹ which can easily be seen as similar to the 1991 Convention’s requiring “distinct[ness].”⁵⁰ They both require the new variety to be sufficiently homogeneous, with respect to the “particular features of its sexual reproduction or vegetative propagation,”⁵¹ which is similar to the “uniform[ity]” requirement in the 1991 Convention.⁵² Finally, similar to the 1991 Convention, both earlier Acts require that “[t]he new variety must be stable in its essential characteristics, that is to say, it must remain true to its description after repeated reproduction or propagation or, where the breeder has defined a particular cycle of reproduction or multiplication, at the end of each cycle.”⁵³

VI. Relationship to Other Intellectual Property Laws

Each Convention (1991, 1978, and 1961/1972) eliminates the problem of conflicts between the laws of the member states and the provisions of the Convention itself. Chapter IX, Article 30(2) of the 1991 Convention⁵⁴ states that “[i]t shall be understood that, on depositing its instrument of ratification, acceptance, approval or accession, as the case may be, each State or intergovernmental organization must be in a position, under its laws, to give effect to the provisions of this Convention.”

Agreement between the provisions of the Conventions pertaining to breeder’s rights and measures taken by each member State of the Union to “regulate the production, certification and

⁴⁷ See 1961 Convention, *supra* note 15, art. 6(1)(b); see also 1978 Convention, *supra* note 30, art. 6(1)(b)(i).

⁴⁸ See 1991 Convention, *supra* note 4, ch. III, art. 6.

⁴⁹ See 1961 Convention, *supra* note 15, art. 6(1)(a); see also 1978 Convention, *supra* note 30, art. 6(1)(a).

⁵⁰ See 1991 Convention, *supra* note 4, ch. III, art. 7.

⁵¹ See 1961 Convention, *supra* note 15, art. 6(1)(c); see also 1978 Convention, *supra* note 30, art. 6(1)(c).

⁵² See 1991 Convention, *supra* note 4, ch. III, art. 8.

⁵³ See 1961 Convention, *supra* note 15, art. 6(1)(d); see also 1978 Convention, *supra* note 30, art. 6(1)(d).

⁵⁴ See 1961 Convention, *supra* note 15, art. 31(3); see also 1978 Convention, *supra* note 30, art. 30(3).

marketing of seeds and propagating material”⁵⁵ are seen somewhat differently. The breeder’s right in the 1961/1972 and 1978 Conventions is seen as “independent”⁵⁶ of the measures taken by the member states. The 1991 Convention, interestingly enough, does not include this particular provision.

VII. Conclusion

There are many more important distinctions and similarities that could be drawn between the different versions of the UPOV system that are applied around the world. The importance of giving the proper respect to the differences between the different amendments cannot be understated because one must know which law to apply and in which country. The internationalization of patent law that has taken place within the last century makes it necessary to understand exactly how to deal with different countries and their laws.

⁵⁵ See 1961 Convention, *supra* note 15, art. 14(1); *see also* 1978 Convention, *supra* note 30, art. 14(1).

⁵⁶ 1978 Convention, *supra* note 30, art. 14(1). “However, such measures shall, as far as possible, avoid hindering the application of the provisions of this Convention.” *Id.* art. 14(2).