

Contesting Monsanto's Patents on Life: Transnational Juridical Dialogue and the Influence of the European Court of Justice on Soybean-Exporting Countries

Marcelo Dias Varella
Maria Edelvacy Pinto Marinho*

This is probably one of the most important cases in intellectual property law today, involving around US\$3 billion in damages. It concerns Monsanto's patents on soybeans in Brazil and Argentina and its exports to the European Union. Article 27.3(b) of the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) allows states to exclude plants and animals as patentable subject matter. Both Brazil and Argentina prohibit patents on plants, yet for years Monsanto employed tactics for collecting royalties from producers of Roundup Ready® (RR) soybean crops in the two countries. The company's collection scheme exploited the assumption that royalties would be owed in the importing countries, where such patents are allowed. In 2009, the European Court of Justice (ECJ) indirectly addressed this issue, denying patent holders exclusive rights to products, such as soy meal derived from a patented crop, that contained no significant traces of a patented gene. Although the court's decision did not explicitly address the collection of royalties in the exporting countries, it nevertheless had an impact on agriculture in Brazil and Argentina, the largest soybean-exporting economies in the world. This Article discusses that impact, a clear case of an international "dialogue of judges," and two questions related to the dispute. First, can patent rulings in Europe affect the legal system in a South American country of export? And second, does a patent on RR soybeans also apply to products derived from or containing those soybeans? The Article also shows how the ECJ's decision directly influenced the Brazilian and Argentinian legal systems and, in doing so, changed the balance of power between national and international actors.

I.	INTRODUCTION	80
II.	THE TRIPS AGREEMENT AND THE LEGAL TREATMENT OF BIOTECHNOLOGY INVENTIONS	82
III.	THE CONVEYANCE OF EUROPEAN INTELLECTUAL PROPERTY RIGHTS TO EXPORTERS' COUNTRIES	86
IV.	THE LEGAL DISCUSSION IN EUROPEAN COURTS.....	89
V.	THE BRAZILIAN STRATEGY AND POSSIBLE REPERCUSSIONS OF THE EUROPEAN DECISIONS	94
VI.	CONCLUSIONS.....	103

© 2013 Marcelo Dias Varella and Maria Edelvacy Pinto Marinho.

* Marcelo Dias Varella and Maria Edelvacy Marinho received Ph.D.s in Law from University of Paris, Sorbonne, and are Professors at the University Center of Brasilia. Varella was previously a Visiting Scholar at the University of California, Berkeley, School of Law. The authors can be reached by e-mail at marcelodvarella@gmail.com and mariaedelvacy@gmail.com.

I. INTRODUCTION

Decisions made by the European Court of Justice (ECJ) and certain European national courts in late 2009 and early 2010 have jeopardized the balance of power between Brazilian and Argentinian soybean producers, on the one hand, and companies holding intellectual property rights to soybeans, on the other. Royalties for soybeans and processed soy products are mandated by intellectual property rights in certain consumer markets, mainly in Europe. About 61.8% of the soy exported from Brazil and Argentina to the European market is sold as soy meal.¹ If the ECJ rulings had favored charging royalties for Roundup Ready[®] (RR) soy products, such as soy meal, as a requirement for their entrance into Europe, producers in countries such as Argentina and Brazil, which do not recognize patents protecting this soybean variety, would have been required to pay royalties on a commodity not protected in their home countries.²

The relationship between patent law and the agricultural sector dates back to the Paris Convention of 1883.³ Delegates of the participating states took care to clarify that industrial property, the

1. See *Pesquisas e estudos técnicos Referentes à avaliação técnica, econômico-financeira e jurídico-regulatória de soluções destinadas a viabilizar o sistema logístico ferroviário de carga entre os portos no sul/sudeste do Brasil e os portos do Chile* [Research and Technical Studies for the Technical, Economic-Financial, and Legal-Regulatory Evaluation of Solutions for Facilitating the Logistical System for Rail Cargo Between the Ports of South/Southeast Brazil and the Ports of Chile], BRAZ. DEV. BANK (BNDES), http://www.bndes.gov.br/arqs/corredor_bioceanico/RelatorioBioceanico_BR_Web.pdf (last visited Nov. 19, 2013).

2. Brazil does not recognize the possibility of patenting plants. According to article 18 of the Brazilian Industrial Property Code:

The following are not patentable: . . . III. all or parts of living beings, except transgenic microorganisms that satisfy the three requirements of patentability—novelty, inventive step, and industrial application—provided for in Article 8 and which are not mere discoveries.

Sole Paragraph—For the purposes of this Law, transgenic microorganisms are organisms, except for all or part of plants or animals, that express, by means of direct human intervention in their genetic composition, a characteristic normally not attainable by the species under natural conditions.

CÓDIGO DE PROPRIEDADE INDUSTRIAL [C.P.I.] [INDUSTRIAL PROPERTY CODE] art. 18 (Braz.). As a signatory to the 1978 International Convention for the Protection of New Varieties of Plants (UPOV Convention), Brazil prohibits the dual protection of a plant by patent and the plant varieties protection system. Argentina's patent law provides, "[Patent protection does not extend to] all biological and genetic material existing in nature or derived therefrom in biological processes associated with animal, plant and human reproduction, including genetic processes applied to the said material that are capable of bringing about the normal, free duplication thereof in the same way as in nature." Law No. 24481 art. 60, May 23, 1995, [28232] B.O. 1 (Arg.).

3. See UNION INTERNATIONALE POUR LA PROTECTION DE LA PROPRIÉTÉ INDUSTRIELLE, ACTES DE LA CONFÉRENCE POUR LA PROTECTION DE LA PROPRIÉTÉ INDUSTRIELLE [PROCEEDINGS OF THE CONFERENCE FOR THE PROTECTION OF INDUSTRIAL PROPERTY] 38 (1900).

subject of the Convention, should also include agricultural inventions.⁴ It is important to point out that at the time the Convention was signed, agricultural inventions consisted primarily of machinery for the cultivation and harvesting of crops. In recent years, biotechnology developments have expanded the use of agricultural technologies, generating an increase in agricultural production through the creation of plants resistant to certain weather conditions, herbicides, and pests.⁵ However, the protection of biotechnology inventions like these by patent law has also had material consequences with respect to the freedom of farmers to reproduce and sell seed containing patented genes, even in countries that do not accept the patenting of genes.⁶

The freedom of countries to deny patents on genes was recently put to the test in Europe. The issue became more interesting when the European courts decided on the admissibility of third countries' laws. At issue was the export of Argentinian soybean meal made from RR soy, which had been patented in the European Patent Office by the Monsanto Company.⁷ The company claimed that the cargo could not enter European Union territory without payment of royalties for the use of technology patented in Europe.⁸ We show here that these decisions, rather than exhibiting the expected extrajurisdictionality of the laws of one group of countries over another, reinforced the capacity of third countries to enforce their own laws. A productive dialogue of judges ensued, but without direct contact.

We highlight the strategies used to protect genetically modified soybeans, the positions of the actors in soy-producing countries, and the consequences of the European decisions for the nonextension of intellectual property rights to processed products. In the process, we demonstrate the freedoms enjoyed by producers in countries that do not, in theory, recognize the patenting of genes in commercial production relative to countries where this practice is legal. We intend to show the effective dialogue between the European courts and the South American courts on intellectual property rights. This dialogue created a multilateral legal framework for intellectual property and global agricultural

4. See G.H.C. BODENHAUSEN, GUIDE TO THE APPLICATION OF THE PARIS CONVENTION FOR THE PROTECTION OF INDUSTRIAL PROPERTY 24-25 (1st ed. 1969).

5. See generally FOOD & AGRIC. ORG. OF THE UNITED NATIONS (FAO), BIOTECHNOLOGIES FOR AGRICULTURAL DEVELOPMENT (2011).

6. See Marcelo Dias Varella, *Intellectual Property and Agriculture: The Case on Soybeans and Monsanto*, 18 J. TECH. L. & POL'Y 59 (2013).

7. See *id.*

8. Christopher Heath, *The Scope of DNA Patents in the Light of Recent Monsanto Decisions*, 40 IIC: INT'L REV. INTELL. PROP. & COMPETITION L. 940, 941-42 (2009).

commodities trade. We demonstrate in this Article that the European decisions directly affected the Brazilian and Argentinian legal systems, changing the balance of power between national and international actors.

This subject is particularly important due to the size of the economic transactions involved and the cases' legal novelty. The Brazilian decision ordering Monsanto to return all royalties paid is estimated to be worth around \$3 billion.⁹ This is about three times the compensation resulting from the *Apple v. Samsung*, and one of the highest amounts in the history of intellectual property rights.¹⁰ The approach taken by the ECJ is innovative because it analyzes intellectual property in agriculture as a dialogue among courts and reveals the important role that judiciaries in emerging countries are assuming as a consequence of the these countries' growing importance in international trade.

This Article is divided into three parts covering the case and its consequences. First, we analyze whether countries have the freedom not to patent genes under the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS or TRIPS Agreement) and then analyze the arguments used by Monsanto and Argentina in the European courts. Next, we explore the implications of these decisions for Brazilian agriculture and the repercussions of recent Brazilian court decisions following up on the European cases regarding royalties for Monsanto's RR soybeans. Finally, we discuss the repercussions of the European decisions, including the dismantling of a network of contracts between Monsanto and the whole entrepreneurial chain of soy production.

II. THE TRIPS AGREEMENT AND THE LEGAL TREATMENT OF BIOTECHNOLOGY INVENTIONS

TRIPS is a multilateral treaty that is binding on all members of the World Trade Organization (WTO).¹¹ The TRIPS Agreement has a global reach, with more than 140 parties, and fixes a minimum set of standards that all countries must meet with regard to intellectual property rights.¹² TRIPS Agreement article 27.1 states that all fields of technology should be the object of patents, without discrimination.¹³ However, some

9. Varella, *supra* note 6, at 61.

10. *Id.*

11. *See* Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, 1869 U.N.T.S. 299 [hereinafter TRIPS].

12. *See id.*

13. *Id.* art. 27 ("1. Subject to the provisions of paragraphs 2 and 3, patents shall be available for any inventions, whether products or processes, in all fields of technology, provided

products and production processes have been excluded from this obligation, whether for noncommercial reasons, such as national security or public order, or because they could be better protected by other intellectual property rights.¹⁴

The biotechnology sector, one of the excluded sectors, is the object of a specific provision ensuring that WTO members may refuse the patenting of certain inventions.¹⁵ A particularly contentious issue relates to the patenting of plants and animals. There have been many controversies surrounding the economic interests and rationale behind the patent system's protection of this subject matter, even among developed countries.¹⁶ The final text of TRIPS reflects the lack of consensus. Article 27.3(b) states that members may exclude from patentability "plants and animals other than microorganisms and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes."¹⁷ WTO members are obligated to guarantee some form of protection for plants; although *sui generis*, protection of this right is usually accomplished through the adoption of laws for the protection of plant varieties, as provided for under the convention of the International Union for the Protection of Plant Varieties (UPOV system).¹⁸

The choice made by Brazil and other countries to protect plant varieties through a cultivar system is understandable. The UPOV system allows farmers who make use of a cultivar to reproduce the seeds

that they are new, involve an inventive step and are capable of industrial application. Subject to paragraph 4 of Article 65, paragraph 8 of Article 70, and paragraph 3 of this Article, patents shall be available and patent rights enjoyable without discrimination as to the place of invention, the field of technology and whether products are imported or locally produced.”)

14. *Id.* (“2. Members may exclude from patentability inventions, the prevention within their territory of the commercial exploitation of which is necessary to protect *ordre public* or morality, including to protect human, animal or plant life or health or to avoid serious prejudice to the environment, provided that such exclusion is not made merely because the exploitation is prohibited by their law.”).

15. *Id.* (“3. Members may also exclude from patentability . . . (b) plants and animals other than micro-organisms, and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes. However, Members shall provide for the protection of plant varieties either by patents or by an effective *sui generis* system or by any combination thereof. The provisions of this subparagraph shall be reviewed four years after the date of entry into force of the WTO Agreement.”).

16. The European Union has established a policy to address the peculiarities of biotechnological inventions. Council Directive 98/44/EC, 1991 O.J. (L 213). The Supreme Court of Canada discussed the patentability of a mouse genetically engineered to develop cancer in the case *Harvard College v. Canada* [2002] S.C.R. 45 (Can.).

17. TRIPS, *supra* note 11, art. 27.3.

18. *See* International Convention for the Protection of New Varieties of Plants, Dec. 2, 1961, 815 U.N.T.S. 89.

necessary to replant another crop.¹⁹ Besides reducing production costs, this ability significantly expands the freedom of farmers to use protected plants and seeds. If such use is not allowed under the patent system, farmers must purchase new seed for each new crop.

Many developing countries have used the “national margin of appreciation” granted by the TRIPS Agreement to exclude the patentability of plants and animals,²⁰ including sequencing and modifications in their respective genetic codes.²¹ There is no dispute in the WTO regarding the possibility of countries using the national margin of appreciation to exclude such innovations from patent law, because the use of such technology remains restricted to the territory of each country. The requirement that plants be patentable was subject to commercial negotiation rounds in bilateral agreements to supplement TRIPS (commonly referred to as TRIPS-Plus), but still there was no consensus among the parties, even among innovative and more developed countries.²²

TRIPS also provides for rules on border measures to ensure the effectiveness of intellectual property rights. This requirement obliges parties to adopt procedures that allow the holder of any intellectual property right who suspects that an imported product is counterfeit to request suspension of the release of those goods by customs authorities pending proper verification.²³ The holder of the intellectual property right must present evidence that the importing country also believes that

19. *Id.*; see Varella, *supra* note 6, at 65-66.

20. The concept of discretion was used by the European Court and has been extensively analyzed. See MIREILLE DELMAS-MARTY, *LES FORCES IMAGINANTES DU DROIT: LE RELATIF ET L'UNIVERSEL* [THE IMAGINATIVE FORCES OF LAW: THE RELATIVE AND THE UNIVERSAL] (2006). The author argues that discretion is a negotiation of a trading margin of appreciation, that is, a margin of difference, so that countries can apply the provisions negotiated to tailor them to their respective legal traditions, as well as their economic and cultural particularities. To ensure that this “freedom” does not undermine the goal of integration inherent in the treaty, countries can control the application of these national margins of appreciation through the courts. *Id.* at 16-17.

21. See TRIPS, *supra* note 11, art. 27; World Intellectual Prop. Org. [WIPO], *Exclusions from Patentable Subject Matter and Exceptions and Limitations to the Rights*, WIPO Doc. SCP/15/3 (Jan. 1, 2010).

22. See WIPO, *supra* note 21.

23. TRIPS, *supra* note 11, art. 51 (“Members shall, in conformity with the provisions set out below, adopt procedures to enable a right holder who has valid grounds for suspecting that the importation of counterfeit trademark or pirated copyright goods may take place, to lodge an application in writing with competent authorities, administrative or judicial, for the suspension by the customs authorities of the release into free circulation of such goods. Members may enable such an application to be made in respect of goods which involve other infringements of intellectual property rights, provided that the requirements of this Section are met. Members may also provide for corresponding procedures concerning the suspension by the customs authorities of the release of infringing goods destined for exportation from their territories.”).

the imported product violates intellectual property rights.²⁴ Such measures are aimed at curbing counterfeiting among WTO members.²⁵ Besides the possibility of retaining counterfeit products at customs, TRIPS also provides that WTO members shall establish procedures for civil, administrative, and criminal matters to ensure that holders of intellectual property rights can enforce those rights.²⁶

TRIPS differs from other treaties on patents because it goes beyond the rules of substantive content of general patent rights by providing procedures that can also be used by rights holders in case of violations by third parties.²⁷ Members must incorporate these provisions into their legal systems. As discussed below, E.U. legislation has gone further than required under TRIPS in defining the procedures for customs control of suspected counterfeit goods.²⁸

Agriculture is one of the largest sectors of international trade.²⁹ Humans focus their consumption on a relatively small number of plant species.³⁰ Global production is concentrated in a few countries, known collectively as the Cairns Group.³¹ These factors combine to enable the global market to be concentrated among a small number of companies that control the main factors of production. This allows for the patent protection of genes that can be used worldwide for global control of the supply chain and food safety.

The high level of global trade integration in recent decades limits the freedom of countries to set the parameters of intellectual property rights when an important part of their production is exported.³² In the case of the soy exports discussed here, the issue is whether there would

24. *Id.* art. 52 (“Any right holder initiating the procedures under Article 51 shall be required to provide adequate evidence to satisfy the competent authorities that, under the laws of the country of importation, there is prima facie an infringement of the right holder’s intellectual property right and to supply a sufficiently detailed description of the goods to make them readily recognizable by customs authorities. The competent authorities shall inform the applicant within a reasonable period whether they have accepted the application and, where determined by the competent authorities, the period for which the customs authorities will take action.”).

25. *Id.* art. 51.

26. *Id.* arts. 31, 41.

27. *Id.* art. 61.

28. *See* Council Regulation 1383/2003, 2003 O.J. (L 196) (EC) (concerning customs action against goods suspected of infringing certain intellectual property rights and the measures to be taken against goods found to have infringed such rights).

29. *See generally* ORG. FOR ECON. CO-OPERATION & DEV. (OECD) & FOOD & AGRIC. ORG. OF THE UNITED NATIONS (FAO), OECD-FAO AGRICULTURE OUTLOOK 2006-2015 (2006).

30. *See generally* FAO, <http://www.fao.org> (last visited Oct. 10, 2013).

31. *See Member Countries*, CAIRNS GROUP, <http://cairnsgroup.org/Pages/map/index.aspx> (last visited Oct. 10, 2013).

32. The case presented in this Article is proof of how the relationship between intellectual property and the export of agricultural products can be problematic.

be any impediment to exporting a final product derived from a plant that contains a gene patented in the *importing* country but not in the *exporting* country. This case is more complicated than that of a traditional sector, such as fashion products or artistic creations, where counterfeiting in one country is also recognized and combated by the trading partner. The primary difference is that neither exporters nor importers are obliged to allow patents for plants.

The problem discussed in this study is important because in the European Union, Monsanto holds the patent on the genetic sequence of an enzyme that makes soybeans tolerate the widespread application of a particular herbicide, Roundup, also produced by Monsanto.³³ Legislation in Brazil and Argentina (exporters) regarding this patent diverged from that of the European Union (importer). The legal questions at hand are whether patents in Europe can affect an exporter's legal system and whether any effect would extend to products derived from or including soybeans.

III. THE CONVEYANCE OF EUROPEAN INTELLECTUAL PROPERTY RIGHTS TO EXPORTERS' COUNTRIES

Monsanto's patent on the genetic sequence of the enzyme in RR soybeans is not protected in Argentina.³⁴ Law No. 24481 excludes patent protection of essentially biological processes; substances preexisting in nature; and genetic material of plants, animals, and human beings in original form.³⁵ However, it is permissible to protect the process for obtaining genetically modified plants.³⁶ When Argentina acceded to TRIPS, it changed its industrial property legislation. Based on an option granted by TRIPS, Monsanto tried unsuccessfully to obtain revalidation in Argentina of a patent obtained on RR soybeans in the United States in 1990.³⁷ The Argentinian court denied the requests for the revalidation of foreign patents, among them Monsanto's RR soybean patent.³⁸

This fact had no commercial repercussions, and RR soybean seeds continued to be sold in Argentina. It is estimated that today over 90% of soybeans produced in Argentina are genetically modified and use the

33. Varella, *supra* note 6, at 67, 78.

34. See Carlos M. Correa, *A Monsanto Perde Sua Patente* [*Monsanto Loses Its Patent*], MONDE DIPLOMATIQUE BRASIL (Dec. 1, 2010), <http://www.diplomatique.org.br/artigo.php?id=825>.

35. Law No. 24481 arts. 6(g), 7(b), May 23, 1995, [28232] B.O. 1 (Arg.).

36. *Id.*

37. Correa, *supra* note 34.

38. *Id.*

resistant gene developed by Monsanto.³⁹ Most genetically modified soy seeds are produced and marketed by Monsanto.⁴⁰ In 2005, Monsanto changed its legal strategy in Argentina, prompting producers to begin paying royalties on a technology not protected in the country if they wished to export to the European market, where RR soy is protected by patent law.⁴¹ It was a shocking measure because a significant portion of Argentinian production is exported.⁴²

When the producers in Argentina refused to pay, Monsanto began compelling European importers of Argentinian soy to pay royalties for RR soybeans to avoid being subject to legal action.⁴³ In effect, Monsanto sought to reach Argentinian producers through European buyers. The legal basis they used was the patent owner's option under TRIPS Agreement, also recognized under European law, of preventing the importation of an unauthorized patented product.⁴⁴ The change in Monsanto's strategy was founded on European Council Regulation 1383/2003. This regulation refers to the intervention of customs authorities against goods suspected of infringing certain intellectual property rights and to measures against goods found to have infringed such rights.⁴⁵ It is intended to implement the obligations of TRIPS with regard to border measures and measures to restrain counterfeiting analyzed in the previous point, but it should be recognized that Regulation 1383/2003 goes far beyond TRIPS.⁴⁶ The regulation allows rights holders to request the withholding of goods at customs when they suspect that the goods are counterfeit.

Given this requirement, customs authorities may retain the goods for investigation. The holders have a period from three to twenty days to

39. Heath, *supra* note 8, at 943.

40. See Correa, *supra* note 34 (stating that Monsanto is the world's largest agrobiotechnology company).

41. *Id.*

42. *Id.*

43. *Id.*

44. Article 28 of TRIPS states:

1. A patent shall confer on its owner the following exclusive rights:

(a) where the subject matter of a patent is a product, to prevent third parties not having the owner's consent from the acts of: making, using, offering for sale, selling, or importing for these purposes that product;

(b) where the subject matter of a patent is a process, to prevent third parties not having the owner's consent from the act of using the process, and from the acts of: using, offering for sale, selling, or importing for these purposes at least the product obtained directly by that process.

TRIPS, *supra* note 11, art. 28.

45. See Council Regulation 1383/2003, 2003 O.J. (L 196) (EC).

46. See *id.*

verify counterfeiting and file a lawsuit.⁴⁷ The person responsible for the merchandise may then authorize its destruction to avoid the high cost of storage during the process. If it is subsequently found that the goods were not counterfeit, the injured party must be compensated by the owner of the intellectual property right who required the retention of the goods. If the goods are shown to be counterfeit, the party responsible for the goods may pay in court the amount due to the patent holder for the release of the goods. According to some authors, this regulation does not include the protection afforded by TRIPS to parties suspected of importing counterfeit products, which causes an imbalance unintended by the Agreement.⁴⁸ This imbalance has prompted abuse by holders of intellectual property rights.⁴⁹

This abuse can be seen in the case of Monsanto against importers of soybeans from Argentina. Once Regulation 1383/2003 was adopted, the company started to threaten soybean importers with retention of their product in European ports if the importers did not pay royalties for the technology in RR soybeans.⁵⁰ Producers and importers of Argentinian soy did not accept Monsanto's proposal. The company then requested the retention of goods at customs ports in Spain, the United Kingdom, and the Netherlands.⁵¹ Thus, the lack of a patent on RR soybeans in Argentina did not prevent Monsanto from requiring Argentinian producers to pay for a technology not protected in their country, as the

47. *See id.*

48. Bernard Remiche & Vincent Cassiers, *Lutte anti-contrefaçon et transferts de technologies nord-sud: un véritable enjeu* [Anti-Counterfeiting and the North-South Transfer of Technology: A Real Challenge], 23 REVUE INTERNATIONALE DE DROIT ÉCONOMIQUE [R.I.D.E.] 277 (2009) (Fr.).

49. European Council Regulation 1383/2003 is the subject of inquiries by Brazil and India in the WTO, in which they question its applicability to goods in transit. In this specific case, the seized goods were drugs produced in India and China destined for Latin America, Africa, and Oceania. These drugs, although protected by patents in European countries, did not enjoy this protection in the exporting and importing countries. The goods were not intended to be marketed in Europe. Certain pharmaceutical companies use the regulation in question to curb international trade between countries with the technological capacity to produce drugs (patented in Europe) and countries that do not have the means to do so. It is important to note that patent protection for drugs was only a recent development in some countries. This means that many drugs still protected in Europe are not protected in India, several countries in Africa, and certain countries in Latin America. The trade of patented drugs between these countries is therefore legal under TRIPS. It is estimated that during the period between 2008 and 2009, eighteen such shipments were seized at European ports. These seizures had a large impact on access to medicines in developing countries. *See* Request for Consultations by India, *European Union and a Member State—Seizure of Generic Drugs in Transit*, WT/DS408/1 (May 19, 2010); Request for Consultations by Brazil, *European Union and a Member State—Seizure of Generic Drugs in Transit*, WT/DS409/1 (May 19, 2010).

50. Correa, *supra* note 34.

51. *Id.*

European courts recognized the right of Monsanto to prevent the entry of Argentinian soybean meal into Europe without payment of royalties.⁵² In effect, Argentina had to accept European intellectual property law. This outcome shows that in a globalized economy, intellectual property rights are leveled by the strongest normative framework and not necessarily by the national political choices permitted by TRIPS.

IV. THE LEGAL DISCUSSION IN EUROPEAN COURTS

The legal discussion in European courts regarding this case focused on the possibility of retention by customs of soybean meal produced with genetically modified soy, and the extension of these rights to processed products. The courts did not even consider patent holders' potential abuse of their patents with respect to possibly counterfeited materials. In fact, their intent was to examine the extent of patent protection of RR soybeans based only on the European legal framework.

Soy importers argued that the object of the patent in question was a biotechnology invention, and Directive 98/44/EC should therefore apply. The directive provides different treatments for determining whether products are counterfeit.⁵³ Article 9 states, "[T]he protection conferred by a patent on a product containing or consisting of genetic information [means any] material, save as provided in Article 5(1), in which the product [is] incorporated and in which the genetic information is contained and performs its function."⁵⁴ Because the product exported by Argentina was soybean meal and not seed, it was a product derived from the protected invention. The main question was whether the soybean meal exported to Europe contained a significant amount of the protected gene and whether this gene played the role for which the processed product was cultivated.

Given that developing countries like Brazil derive most of their exports from agriculture, the European court's decision regarding the extent of patent protection for genes on processed products is of great importance.⁵⁵ If the European Court of Justice had ruled in favor of

52. *Id.*

53. Council Directive 98/44, 1991 O.J. (L 213).

54. *Id.* art. 9 (emphasis added).

55. The Brazilian agricultural sector accounts for a large share of the world's exports. Brazil is the world's leading sugar, coffee, and orange juice exporter, the second-largest sugar cane, beef, and tobacco exporter, and the third-largest maize exporter. Ministério da Agricultura do Brasil [Ministry of Agric. of Braz.], *Brasil Projeções do Agronegócio [Brazil Agribusiness Projections]*, AGRICULTURA.GOV.BR, http://www.agricultura.gov.br/arq_editor/file/Ministerio/gestao/projecao/PROJECOES%20DO%20AGRONEGOCIO%202010-11%20a%202020-21%20-%2020_0.pdf (last visited Nov. 14, 2013).

Monsanto, adopting a broad interpretation of the rights of patent holders, farmers from countries that do not recognize the protection for genes would have found themselves compelled to pay royalties on technologies not protected in their countries. This outcome would have meant that the law and interpretations adopted by importing countries can influence exporting countries, even if the laws of those countries differ.

In 2007, the Commercial Court of Madrid ruled in favor of a restrictive interpretation of the rights of patent holders because of the limitations imposed by Directive 98/44/EC.⁵⁶ Monsanto, however, claimed that no restriction should be applied to Directive 98/44/EC, because according to the national patent law, the party responsible for a product containing traces of a protected genetic modification should request permission from the patent holder to sell such a product.⁵⁷ For Monsanto, the matter was not the protection of a processed product, but the protection of the genetic sequence itself, because traces of the sequence were found in Argentinian soybean meal.

According to the court, policy expressly limits the exclusive rights of the holder of the patent when the invention relates to genetic information.⁵⁸ The aim of the policy was to protect biotechnology inventions, while specifying certain inherent limitations of these inventions and the legislature made clear that processed products without significant traces of the patented gene would not afford the patent holder exclusive rights deriving from the title.⁵⁹ The protection given by the patent is aimed at ensuring exclusivity for its holder with regard to products or processes in which the protected genetic sequence might be useful. In this case, the Madrid court found that the soybean meal questioned by Monsanto contained few traces of the gene patented in Europe and that in this product the gene did not play the role for which it was protected. Thus, there was no instance of counterfeiting.⁶⁰

In the British case, in addition to the arguments presented above, the importing company, Cargill, argued that Monsanto had for years encouraged the planting of RR soybeans in Argentina without ever

56. See The Netherlands/Hague Dist. Ct., *Protection of Patent for Biological Material—DNA Forms Part of Soya Flour, but Does Not Perform Function at Moment of Alleged Infringement—EC Directive 98/44—“Roundup Ready,”* IIC: INT’L REV. INTELL. PROP. & COMPETITION L. 228, 233 (2009).

57. *Id.* at 234.

58. *Id.* at 235-36.

59. *Id.* at 235.

60. *Id.* at 237.

requesting payment of royalties.⁶¹ Once the planting of this variety was widespread, Monsanto decided it was owed royalties for the soy exported to Europe. Therefore, Monsanto could not be treated as having incurred damages in a situation that the company itself had encouraged. As for the technical arguments, Cargill argued that the protection of the genetic sequence was based on its being isolated and that Monsanto's right of exclusivity was limited to cases where the genetic sequence was used.⁶² The claims made in the patent application by Monsanto pointed to a protection of this sort. Therefore, a broader interpretation was not appropriate.⁶³

The British court ruled similarly to the Spanish court, claiming that the traces of genetic sequence found in soybean meal did not infringe on Monsanto's patent because the sequence was not isolated in accordance with Monsanto's patent application.⁶⁴ The fact that the soybean meal contained traces of the protected sequence did not change the purpose for which the bran was purchased: to feed animals. In this case, the resistance to the herbicide lacked meaning, as the isolated gene itself would not perform the functions for which it was created.⁶⁵

In the Netherlands, the case of Monsanto's RR soybeans took a different turn. The national court had doubts about the interpretation of Directive 98/44/EC and asked the Court of Justice of the European Union (CJEU) to clarify the extent of protection of patents on genes in Europe.⁶⁶

61. *Monsanto Tech. LLC v. Cargill Int'l SA*, [2007] EWHC 2257 (Pat) 153, [2008] F.S.R. 7 (Eng.).

62. *Id.*

63. *Id.*

64. *Id.*

65. *Id.*

66. *Id.*; Case C-428/08, *Monsanto Tech. LLC v. Cefetra BV*, 2010 E.C.R. I-6765. The Court thus set out the questions referred to it by the Dutch court:

(1) Must Article 9 of Directive 98/44 . . . be interpreted as meaning that the protection provided under that provision can be invoked even in a situation such as that in the present proceedings, in which the product (the DNA sequence) forms part of a material imported into the European Union (soy meal) and does not perform its function at the time of the alleged infringement, but has indeed performed its function (in the soy plant) or would possibly again be able to perform its function after it has been isolated from that material and inserted into the cell of an organism? (2) Proceeding on the basis that the DNA sequence described in claim 6 of patent No EP 0 546 090 is present in the soy meal imported into the Community by Cefetra and [Toepfer], and that the DNA is incorporated in the soy meal for the purposes of Article 9 of [the Directive] and that it does not perform its function therein: does the protection of a patent on biological material as provided for under [the Directive], in particular under Article 9 thereof, preclude the national patent legislation from offering (in parallel) absolute protection to the product (the DNA) as such, regardless of whether that DNA performs

The significance of the CJEU's decision was recognized by the European Union Advocate General, who stated that the "interpretation that the Court is required to give will apply generally in all cases in which a product imported into EU territory is derived from the processing, in a non-member state, of a genetically modified plant in respect of which there is a patent valid in EU territory."⁶⁷ Upon analyzing the content of the Netherlands' application, the Advocate General called for the implementation of Directive 98/44/EC, rejecting Monsanto's reasoning that the national patent law should be applied in this case.⁶⁸ For Monsanto, policy did not exhaustively deal with the protection of biotechnology innovations; it represented a minimal protection because it was adopted by the states of the Union, which could potentially grant more extensive protection.

This argument was rejected by the Advocate General, who argued:

The body of rules laid down in Directive 98/44 is not complete but must be deemed to be exhaustive in the area with which it deals: the corollary being that, in these areas, national legislation cannot provide for a level of patent protection which is wider than that provided for under the directive.⁶⁹

its function, and must the protection as provided under Article 9 of [the Directive] therefore be deemed to be exhaustive in the situation referred to in that provision, in which the product consists in genetic information or contains such information, and the product is incorporated in material which contains the genetic information? (3) Does it make any difference, for the purpose of answering the previous question, that patent No. EP 0 546 090 was applied for and granted (on 19 June 1996) prior to the adoption of [the Directive] and that such absolute product protection was granted under national patent legislation prior to the adoption of that directive? (4) Is it possible, in answering the previous questions, to take into consideration the TRIPS Agreement, in particular Articles 27 and 30 thereof?

Id. at I-6802 to -6803.

67. *Id.* at I-6765, I-6774 (Opinion of Advocate General Mengozzi).

68. *Id.*

69. *Id.* at I-6782. According to the Opinion of the Advocate General, paragraphs 46-48:

46. An initial observation that I consider necessary concerns the fact that the body of rules laid down in Directive 98/44 with regard to patents in the biotechnological sector is manifestly incomplete. Various aspects are left to the national legislature. Moreover, clear evidence to that effect is provided in recital 8 in the preamble to Directive 98/44, which reaffirms the role played by national laws, and the central nature of that role. 47. Nevertheless, the fact that the rules are incomplete does not mean that they are not exhaustive. In fact, it is perfectly conceivable that, even though a EU legislative measure does not cover all aspects of a given sector, the system established by that measure is exhaustive with regard to the particular matters dealt with. In such a case, the freedom of the national legislature in the various Member States is limited to the areas in which the EU legislature has not intervened. 48. In my view, the situation in relation to biotechnological patents dovetails exactly with the framework outlined in point 47 above. The body of rules laid down in Directive 98/44 is not complete, but must be deemed to be exhaustive in the areas with which it deals: the corollary being that, in those areas, national legislation cannot

According to the findings presented by the Advocate General, recognition of the broad interpretation requested by Monsanto would give the patent holder disproportionate protection: “[T]he interpretation proposed by Monsanto would ultimately lead the holder of a biotechnological patent to be granted too wide a range of protection.”⁷⁰ Indeed, as several parties indicated, both in written submissions and at the hearing, it is not possible to determine to what extent or to what point in the food chain and in processed products the traces of DNA originating from genetically modified plants remain identifiable. At issue, of course, was a sequence that no longer played any role, but whose mere presence gave the patent holder control over any number of derived products. As the Argentinian government stressed, with only partially paradoxical reasoning, “[I]f traces of the sequence were to be detected in the stomachs of cattle because the animals had been fed with products derived from the genetically modified plant, even the importation of those cattle could be regarded as an infringement of the patent-holder’s rights.”⁷¹

The CJEU delivered its judgment on July 6, 2010, accepting the arguments of the Advocate General in favor of the applicability of Directive 98/44/EC. The court held that article 9 of the Directive

must be interpreted as not conferring patent right protection in circumstances such as those of the case in the main proceedings, in which the patented product is contained in the soy meal, where it does not perform the function for which it is patented, but did perform that function previously in the soy plant, of which the meal is a processed product, or would possibly again be able to perform that function after it had been extracted from the soy meal and inserted into the cell of a living organism.⁷²

The court reaffirmed what the Spanish court had already decided: that only when the protected gene fulfills its function in another product can counterfeiting be claimed. The court has recognized that in the case analyzed,

[t]he use of a herbicide on soy meal is not, however, foreseeable, or even normally conceivable. Moreover, even if it was used in that way, a patented product intended to protect the life of biological material containing it could not perform its function, since the genetic information can be found

provide for a level of patent protection which is wider than that provided for under the directive.

Id.

70. *Id.* at I-6779.

71. *Id.*

72. *Id.* at I-6814.

only in a residual state in the soy meal, which is a dead material obtained after the soy has undergone several treatment processes.⁷³

In other words, agricultural products derived from a genetically modified product protected by patent law are not subject to control by patent holders.

Monsanto's strategy to force Argentinian farmers to pay royalties on a technology not protected in that country failed in Europe. However, in the case of the company's strategy in Brazil, the effects of the European decisions were different.

V. THE BRAZILIAN STRATEGY AND POSSIBLE REPERCUSSIONS OF THE EUROPEAN DECISIONS

At first, Monsanto adopted a similar strategy in Brazil, applying for a series of patents to protect genetically modified soybeans. Brazilian law expressly prohibits the patenting of plants or parts of plants as well as genes.⁷⁴ To facilitate its patent applications, Monsanto made different claims: that it was not genes or parts of plants that would be covered by the patents, but nonbiological processes, or chemicals.⁷⁵ As in Argentina, some of these requests were denied by the Brazilian Patent and Trademark Office (INPI).⁷⁶ Others were accepted but were judicially challenged by competitors such as Nortox and Zeneca.⁷⁷ In the end, Monsanto obtained an injunction via the judiciary, ensuring a monopoly on their genes for more than ten years.⁷⁸

However, the main strategy that enabled control of Monsanto's soybean production in Brazil was based on a series of contractual arrangements. Monsanto created a partnership strategy with other seed companies and signed several contracts with different actors in the supply chain to ensure a greater return on their investments. These partnerships were based on profit-sharing contracts that enabled greater control over the production and marketing of soy in Brazil.⁷⁹

73. *Id.* at I-6804.

74. CÓDIGO DE PROPRIEDADE INDUSTRIAL [C.P.I.] [INDUSTRIAL PROPERTY CODE] art. 10 (Braz.).

75. Varella, *supra* note 6, at 70.

76. Heath, *supra* note 8, at 941.

77. Varella, *supra* note 6, at 71.

78. *Id.* at 71-72.

79. See Marcelo Dias Varella, *Propriedade Intelectual e sementes: mecanismos de controle das exportações agrícolas pelas empresas multinacionais* [Intellectual Property and Seeds: Mechanisms of Control of Agricultural Exports], 86 REVISTA DA ASSOCIAÇÃO BRASILEIRA DA PROPRIEDADE INTELECTUAL 18 (2007) (Braz.).

In the soybean supply chain, different actors come to the fore: seed producers, retailers, farmers, warehouses, and exporters or traders. A strategy for increasing participation in soybean production in Brazil required agreements or monopolistic mechanisms to be levied on all of these actors. With this strategy, Monsanto increased its share of soybean production in Brazil from about 12.5% to more than 70%.⁸⁰ To conduct a comparative analysis of the two cases, it is important first to understand the main contractual instruments involved.

The main producers of soy in Brazil are Embrapa, FMT Seeds, Monsanto, Coodetec, Pioneer, Nidera, Syngenta, and Fundacep-Fecotrigo.⁸¹ These companies have their own varieties of soybeans, each with specific characteristics. In 2002, Monsanto's share of the domestic market was 12.5%, and beating competitors was difficult.⁸² The company's strategy was to license the gene of its glyphosate-resistant soybeans to competitors for free.⁸³ Monsanto earned funds on the increase in sales of herbicides and the spread of its gene in major soybean-producing regions of the country. Competitors technically improved their varieties and also obtained 12.5% of the "licensing fee" that Monsanto charged farmers for the use of its genetically modified soybeans. Even Embrapa, a public company, joined the agreement.⁸⁴ In the 2008-2009 season, for example, Monsanto paid 8.3 million Brazilian reais (BRL) (about \$4 million) to Embrapa on this basis, and in the last three years, this figure exceeded BRL 20 million.⁸⁵ Based on estimates, the total earned by the company may even surpass BRL 150 million per year.⁸⁶

The farmers' contract with Monsanto states that these companies cannot integrate other technologies protected by third parties into the

80. Varella, *supra* note 6, at 60.

81. Monsanto market share was only 26% in 2007. The main competing companies were Embrapa (29%), FMT (9%), Coodetec (9%), Pioneer (8%), Nidera (7%), Syngenta (4%), and Fundacep-Fecotrigo (2%). SECRETARIA DE ACOMPANHAMENTO ECONÔMICO, MINISTÉRIO DA FAZENDA, ATO DE CONCENTRAÇÃO N.º 08012.003296/2007-78, at 10 (2007).

82. Varella, *supra* note 6, at 74.

83. *Id.*

84. *Id.*

85. Press Release, Monsanto, Monsanto anuncia repasse de R\$ 8,3 milhões para projetos de pesquisa da Embrapa em biotecnologia [Monsanto Announces Transfer of R\$ 8.3 Million for Embrapa Biotechnology Research Projects] (Nov. 4, 2009), http://www.monsanto.com.br/sala_imprensa/includes/template_press_release.asp?noticiaId=734333333234442333233323434343333337D731705357231D4918D9834D3146D75670024BBA.

86. Mauro Zanatta, *Monsanto eleva em 26% royalties da soja* [Monsanto Raises Royalties on Soy by 26%], GLOBO.COM (Aug. 21, 2009, 9:17 AM), http://g1.globo.com/Noticias/Economia_Negocios/0,,MUL1275446-9356,00.html.

plant without authorization from Monsanto.⁸⁷ The commercial operation was challenged in the Administrative Council for Economic Defense, which required the removal of Monsanto's restriction on the technological development of its soybeans.⁸⁸ The seed companies, in turn, demanded that retailers link the sale of soybeans to farmers signing a contract to pay a licensing fee. Farmers felt pressured by the argument of the existence of an intellectual property right. Under the contract, the farmers agreed to make an annual payment on their production, calculated as the average productivity of the farmer and the amount of seed purchased.⁸⁹ Thousands of contracts were signed, which made it possible to create a database through which Monsanto ensures more effective control over the production of their seeds and licensing fee payments.

Monsanto provides two options for payment: one at the end of October (before harvest) and another in January. In 2009, farmers who chose to pay in October paid 0.42 BRL per bag, and if the payment was made in January, the amount charged was 0.45 BRL per bag.⁹⁰ The total value of licensing fees alone in some states, such as Mato Grosso, could reach BRL 80 million per year.⁹¹

However, an important part of the production of soybeans in Brazil was not derived from seeds produced by Monsanto, but from smuggling in Argentina. "Maradona" soybeans, as they became known among farmers, were a different variety from those sold in Argentina.⁹² It was a variety resulting from an hybridization of the Argentinian and Brazilian strains, and better suited to the Brazilian climate. Because the seeds were not purchased from retailers, they were not controlled by Monsanto.⁹³

The solution was to extend control over soybean sales to retail stores, which concentrate the acquisition of farmers' soybeans and are, in turn, concentrated in the hands of a few companies. Through a series of new contracts, warehouses came to control the use of Monsanto's technology. On arrival of a truckload of soybeans to the warehouse, the producer was encouraged to identify whether or not it was transgenic.⁹⁴

87. Varella, *supra* note 6, at 74.

88. See SECRETARIA DE ACOMPANHAMENTO ECONÔMICO, *supra* note 81.

89. Varella, *supra* note 6, at 75-76.

90. *Id.* at 64.

91. *Id.*

92. *Id.* at 67.

93. Michel Fok & Marcelo Varella, *Évolution des règles d'utilisation du soja transgénique au Brésil: Une analyse par un approche systémique de la gouvernance* [Evolution of the Rules of Transgenic Soy Use in Brazil: A Systemic Governance Analysis], 27 POLITIQUES & MANAGEMENT PUBLIC, no. 2, at 3 (2010) (Fr.), available at <http://pmp.revues.org/2172>.

94. Varella, *supra* note 6, at 81.

If the producer spontaneously claimed that the soybean was transgenic, the producer paid a lower licensing fee. Otherwise, the person responsible for the warehouse performed a test with a kit supplied by Monsanto, identifying whether the soybeans contained transgenic content. If the glyphosate-resistance gene was found, the licensing fee charged was greater.⁹⁵

At the same time, Monsanto made a series of agreements with farmers' cooperatives allowing the cooperatives to pay for Monsanto technology voluntarily. Over 300 agreements were made across the country, allowing the legalization of imported seed from Argentina and the expansion of the database.⁹⁶ Traders, large companies exporting soybeans to Europe, were the next actors to be brought into Monsanto's scheme. Control of the traders was exercised directly in the European Union by requiring the payment of royalties by the importing companies, which, in turn, demanded payment from Brazilian exporters.⁹⁷ In this case, all soybean production, even that of soybean meal, was subsumed into Monsanto's payment structure.

This whole structure of contracts was possible due to the expectation of mandatory payment for use of intellectual property. Exporters pressured the weaker actors in the supply chain to pay royalties. Farmers believed that there were intellectual property rights, regardless of the final destination of their soybeans, and accepted the warehouse fees, which were legitimized by the existence of a patent. The European decision, in relation to Argentina, could have a large impact on Brazil. The estimated export of soybeans from Brazil was 88.8 million tonnes in 2010, while the export of soybean meal was 56.7 million tonnes, or 64% of the total exported.⁹⁸ However, the contractual relationships that were established limit the effects of the decision.

Those most affected by the European decision would be farmers and grain processors. For farmers, there are two situations: being contractually bound, having signed a pledge to pay royalties when purchasing seed, and not being contractually bound. The former group is required to continue paying royalties, as per the contract. However, farmers who produce their own seeds or did not sign a contract when

95. See Varella, *supra* note 79.

96. Varella, *supra* note 6, at 76-77.

97. *Id.*

98. DEPARTAMENTO DE COMERCIALIZAÇÃO E ABASTECIMENTO AGRÍCOLA E PECUÁRIO, SECRETARIA DE POLÍTICA AGRÍCOLA, MINISTÉRIO DA AGRICULTURA, SUMÁRIO EXECUTIVO: COMPLEXO DA SOJA [EXECUTIVE SUMMARY: SOYBEAN COMPLEX] (2013), available at <http://www.agricultura.gov.br/politica-agricola/publicacoes/sumario-executivo> (follow "Sumário Executivo-Soja Novembro/2013" hyperlink).

purchasing seed may well question the validity of the patent in Brazil and the collection of royalties on a product intended for export.

Even more explicitly, grain processors and exporters no longer have a reason to require the actors in the supply chain to pay royalties on soy destined for export for several reasons: they will not be compelled to pay them upon delivery of the product to Europe, it means an increase in the price of their input, and the burden of collecting payment lies exclusively with the holder of the intellectual property rights (and the very existence of these rights is still challenged in court). In a sense, the European decisions reduced the pressure on traders in Brazil to pay royalties. It became possible to more vigorously challenge Monsanto's rights, especially in the courts. Among the actions presented, of note is the lawsuit filed by three farmers' associations of Rio Grande do Sul (Passo Fundo, Sertão, and Santiago), which then turned into a class action with more than 370 parties. It was a collective action with national repercussions.⁹⁹

The leading case was a class action filed on April 14, 2009. In this case, there was already a lower court decision, but one still awaiting a decision of the Court of Rio Grande do Sul. Essentially, the farmers argued that (1) they would not have to pay royalties to Monsanto because they had not bought seeds from the company, (2) the figures were exaggerated and breached the principle of the social function of property, (3) Brazilian law would prohibit double patent protection of varieties given that the version of the UPOV used in Brazil only allows for the protection of plants by the UPOV system, and (4) the patents were invalid.¹⁰⁰ Monsanto argued that (1) there were several patents that were valid and recognized by the Brazilian INPI, and (2) there were also records of plant varieties. The INPI sided with Monsanto in the trial.¹⁰¹ In the course of the proceedings, the judge requested that Monsanto submit the titles of patents granting their right, as well as the titles of all intellectual property rights for which they collected licensing fees. Then the judge asked an expert to examine all claims and titles submitted in order to rule on the existence of the rights claimed by Monsanto.

It was found that several challenged patents were pipeline-type patents. This was the result of a system created by TRIPS: the mailbox

99. See Varella, *supra* note 79.

100. See T.J.M.G., Civ. No. 001/1.09.0106915-2, Relator: Giovanni Conti, 04.04.2012, 4108, Diário do Judiciário Eletrônico [D.J.e.], 17.05.2012, 107 (Braz.).

101. *Id.*

system.¹⁰² The mailbox system provides that the countries that use the transition period for the implementation of the Agreement in their national jurisdictions should create a site where applications for patents for inventions not yet protected by state law but protected by TRIPS can be deposited for future examination. The goal is to reduce damages given to the inventors of sectors excluded from patentability under national laws until that time. Thus, once the country transposes the obligations it has assumed under TRIPS, the mailbox can be opened and the examination of inventions can proceed without the novelty date being affected by the commercialization of the invention. Deposit in the mailbox system does not guarantee that a filed application will be granted. The application is still subject to the interpretation of each country of the requirements of patentability (novelty, inventive step, utility) and the exclusions allowed by TRIPS.

In Brazil, the pipeline patent system was established by articles 230 and 231 of Law 9.279/96.¹⁰³ Brazil opted to perform an examination that

102. TRIPS, *supra* note 11, art. 70.8 (“Where a Member does not make available as of the date of entry into force of the WTO Agreement patent protection for pharmaceutical and agricultural chemical products commensurate with its obligations under Article 27, that Member shall (a) notwithstanding the provisions of Part VI, provide as from the date of entry into force of the WTO Agreement a means by which applications for patents for such inventions can be filed; (b) apply to these applications, as of the date of application of this Agreement, the criteria for patentability as laid down in this Agreement as if those criteria were being applied on the date of filing in that Member or, where priority is available and claimed, the priority date of the application; and (c) provide patent protection in accordance with this Agreement as from the grant of the patent and for the remainder of the patent term, counted from the filing date in accordance with Article 33 of this Agreement, for those of these applications that meet the criteria for protection referred to in subparagraph (b).”).

103.

An application for a patent, related to substances, materials, or products obtained by chemical means or processes, and alimentary or chemical-pharmaceutical substances, materials, mixtures, or products, and medications of any kind, as well as the respective processes for obtaining or modifying them, may be filed by a party who enjoys protection guaranteed by a treaty or convention in force in Brazil, in which case it is assured the date of the first patent application filed abroad, provided that its object has not been introduced on any market by direct initiative of the titleholder or by a third party with his consent, and that no serious and effective preparations to exploit the object of the application or of the patent have been made, in this country, by third parties.

- (1) The filing must occur within one year from the date of publication of this Law, and must indicate the date of the first filing abroad.
- (2) A patent application filed on the basis of this Article shall automatically be published, and any interested party may submit comments, within a period of 90 (ninety) days, as to whether it satisfies the provisions in the caput of this Article.
- (3) When Articles 10 and 18 of this Law have been observed and once the provisions established in this Article have been satisfied and the granting of the patent in the country where the first application was filed has been proven, the patent shall be granted in Brazil, just as it was granted in its country of origin.

checks only whether the invention is or is not prohibited by law, without analyzing its novelty, inventiveness, or usefulness. The exam is limited to verification of compliance with a number of conditions:

- (1) the object could not be excluded from protection under Articles 10 and 18;
- (2) objects that have already been placed on the market by the proprietor or with his consent could not be protected;
- (3) inventions in which third parties have already invested in their production for thinking that they were already in the public domain could not be protected;
- (4) evidence of the patent grant in the country where the first application was filed[.]¹⁰⁴

The pipeline patent would remain in effect for the remaining term in the country where the first application was made, as long as this remainder would not exceed a period of twenty years.¹⁰⁵ It was as a result of this system that Monsanto failed to protect patents on RR soybeans in Brazil. These patents were the subject of several cases in which the constitutionality of pipeline patents was questioned. Unlike in the United States, where patents on RR soybeans were first protected, it is permissible to extend the period of validity of a patent in Brazil. Therefore, Monsanto sought a time extension, arguing that the patent was still in effect in the United States.¹⁰⁶

The trial judge issued his ruling in April 2012. The judge did not consider the subjective violation of the social-function-of-property principle or the exorbitant prices charged by way of royalties; he focused

-
- (4) The patent granted on the basis of this Article is assured the period of protection remaining in the country where the first application was filed, calculated from the date of filing in Brazil and limited to the period established in Article 40, not applying the provisions of its Sole Paragraph.
 - (5) An applicant who has filed a patent application that is still pending, related to substances, materials, or products obtained by chemical means or processes, and alimentary or chemical-pharmaceutical substances, materials, mixtures, or products, and medications of any kind, as well as the respective processes for obtaining or modifying them, may submit a new application within the time limit and under the conditions established in this Article, attaching proof of having abandoned the pending application.
 - (6) The provisions of this Law apply, where applicable, to the application filed and the patent granted on the basis of this Article.

CÓDIGO DE PROPRIEDADE INDUSTRIAL [C.P.I.] [INDUSTRIAL PROPERTY CODE] art. 230 (Braz.).

104. *Id.* art. 230.

105. *Id.* art. 40.

106. *See* T.J.M.G., Civ. No. 001/1.09.0106915-2, Relator: Giovanni Conti, 04.04.2012, 4108, Diário do Judiciário Eletrônico [D.J.e.], 17.05.2012, 107 (Braz.).

instead on the issue of the existence of intellectual property rights. The judge's conclusions were very interesting:

- (1) The first patent (PI 11001067-3) was secured by a mechanism called the "pipeline." The day of the deposit used for reference was the day of deposit in the United States. Thus, the patent had expired on January 23, 2007. Monsanto tried to get an extension through actions in various courts, but the requests were recently rejected by federal courts after the payment of compensation.
- (2) The second patent had also expired, on January 13, 2007. Like the first, it was the subject of several lawsuits.
- (3) A third patent had also expired, on August 31, 2010. This patent was the subject of a new extension request that was rejected by the federal court in Rio de Janeiro on April 4, 2011. Monsanto appealed, but its case has not yet been addressed by the federal courts. According to the expert consulted, only the third patent relates to the soybean variety in litigation.¹⁰⁷

The judge ruled that Monsanto did not have rights because the only patent that could uphold Monsanto's right was no longer valid, and Brazilian law prohibits dual protection; thus, the patent in question would have no effect on soybeans. The judge ordered Monsanto to

- (1) return the amount requested by farmers, paid for the 2003/2004 harvest, plus one percent interest, plus the rate of inflation;
- (2) cease the collection of royalties, licensing fees, or indemnification of transgenically produced Brazilian soy, after the 2003/2004 harvest;
- (3) pay legal fees in the amount of five hundred thousand Brazilian reais.¹⁰⁸

Finally, he asserted that farmers, whether small, medium, or large, have the right to produce their own seeds.¹⁰⁹

In June 2012, the Brazilian Supreme Court pronounced its opinion on the legitimacy of a civil action filed by the Rural Union.¹¹⁰ The Minister, Nancy Andrighi, who drafted the appeal, held, "[T]he legitimacy of unions to act in collective processes should be considered broadly, lest we deny the validity of Art. 8, III, of the C.F."¹¹¹ In the vote,

107. *Id.*

108. *Id.*

109. *Id.*

110. S.T.J., Rec. Esp. No. 1.234.386-RS (2011/0037199-1), Relator: Ministra Nancy Andrighi, 12.06.2012, 1077, Diário da Judiciário Eletrônico [D.J.e.], 26.06.2012, 517 (Braz.).

111. *Id.* at 12.

followed by other ministers, the sponsor recognized the “social relevance of the discussion of royalties received from the sale of genetically modified soybeans, since the payment necessarily impacts the final price of the product in the market.”¹¹² As noted, the central content discussed in the process, the legality of Monsanto’s licensing fee, has not yet been examined by the Supreme Court of Brazil.¹¹³

Monsanto appealed this decision. In May 2013, the third chamber of the Superior Court of Justice unanimously upheld the decision of the rapporteur, Justice Ricardo Villas Boas Cueva. The interpretation that the validity of the patent on RR soybeans would expire on September 1, 2010, and not in 2014 as pleaded by Monsanto, was upheld.¹¹⁴ The company also requested that the effects of the previous decision be suspended until the Federal Supreme Court decided on the constitutionality of articles 230 and 231 of the industrial property law that deal with the pipeline patent.¹¹⁵ In his vote, Justice Ricardo Villas Boas Cueva asserted:

The Second Chamber, in the judgment of Resp No. 731.101/RJ, standardized the understanding of the issue in the sense that the protection offered to foreign patents, called “pipeline” patents, lasts for the remaining term of protection in the country where the first application was filed, to the maximum term of protection granted in Brazil—20 years—from the date of the first filing abroad, even if subsequently abandoned.¹¹⁶

In the same sense, Justice Nancy Andrighi reaffirmed her understanding, already given in other proceedings relating to pipeline patents:

[T]he most coherent interpretation of art. 230 of Law No. 9.279/96 is that pipeline patent revalidation is given “from the remaining term the patent has abroad, from the first filing of the patent protection, and not to the patent concession abroad,” nor “from the last application in the country of origin.”¹¹⁷

This is the analysis that best systematizes the devices of the Industrial Property Law and TRIPS, having in mind also the “social interest and technological and economic development of the country,” as

112. *Id.* at 1.

113. *ADI 4234-Ação Direita de Inconstitucionalidade (Processo físico)*, SUPREMO TRIBUNAL FEDERAL, <http://stf.jus.br/portal/processo/verProcessoAndamento.asp?incidente=12879> (last visited Nov. 8, 2013).

114. S.T.R., Rec. Esp. 1.359.965 (2012/2071279-4), Relator: Justice Ricardo Villas Boas Cueva, 31.05.2013, 1297, Diário da Judiciário Eletrônico [D.J.e.], 31.05.2013, 939, 939 (Braz.).

115. *Id.* at 945.

116. *Id.* at 944.

117. *Id.* at 949-50 (Relator Nancy Andrighi concurring).

determined by art. 5, XXIX, of the Constituição Federal, as well as the restrictive interpretation that is subject to the rule in question, given the exceptional nature of pipeline protection, graciously granted by the national legislation.¹¹⁸ This position, at the time unsuccessful, prevailed in subsequent trials and was confirmed by the recent Supreme Court decision.¹¹⁹ However, the result of that decision is still subject to appeal, which Monsanto is sure to take.

Analysis of this case shows that Brazilian law is, in fact, clear regarding the impossibility of obtaining a patent on and plant variety protection of the same plant. Still, there is institutional weakness in Brazil: the courts are slow, and there is a lack of knowledge of patent rights, which hinders the emergence of coordinated solutions. Monsanto uses these institutional weaknesses, as it did in the case of its application for renewal of “pipeline” patents in various courts of the federation and its claim of patent infringement unrelated to the exported soybeans. One of the opinions submitted by Monsanto even included an expert finding of a patent from Monsanto that is not part of the process. Because this is a class-action lawsuit, Monsanto could be ordered to pay all the farmers in the country, even those who were not parties to the case.

VI. CONCLUSIONS

Monsanto’s legal strategy for RR soybeans in Latin America consisted of collecting fees from soybean producers in Argentina and Brazil based on an intellectual property right that, by the law of these countries, could not be recognized. After failing to recover a “technology rate” in Argentina, Monsanto turned to European law to prevent genetically modified soybean meal, exported from Argentina, from entering Europe. Initially, Brazil and Argentina had adopted legal frameworks that forbade patenting of seeds. However, due to globalization and differences with European legislation, the most restrictive legislation prevailed.

When there are different levels of patent protection in different countries and an international treaty creates a level of protection based on the most restrictive one, the other countries with lower level of protection must adapt themselves to the most restrictive protection level. This outcome seems to be an important effect of globalization through TRIPS.

However, Monsanto’s strategy was not successful on appeal. The Spanish, Dutch, and U.K. courts, as well as the ECJ, understood that

118. CONSTITUIÇÃO FEDERAL [C.F.] [CONSTITUTION] art. 5, XXIX (Braz.).

119. *Id.* at 956.

exported soybean meal did not infringe on Monsanto's patent according to European patent law. Despite the fact that the contested goods contained traces of Monsanto's transgene, as soybean meal they did not perform the function for which the transgene was patented. If the European courts had granted Monsanto's request, Argentinian and Brazilian producers would have been forced to pay for a nonexistent intellectual property right in their states. In that situation, agricultural countries would have been denied their right to exclude plants and genes from patentability, an exception allowed by TRIPS.

With the way cleared by the European courts, Brazilian farmers initiated a lawsuit against Monsanto in the Brazilian courts, alleging the nullity of the RR soybean patent in Brazil. Prior to the European decision, their suit was less compelling because they would have had to pay anyway if Europe had obliged them to do so. But their success ultimately may mean that Monsanto will have to return US\$3 billion to the Brazilian agricultural sector.