# A Comparative Look at Bowman vs. Monsanto in the European Context By Claudio Germinario

On May 13, 2013, the US Supreme Court upheld the decisions of the Court of Appeals for the Federal Circuit and of the District Court for the Southern District of Indiana, holding in favour of Monsanto in the Bowman v. Monsanto dispute.

## 1. Background

Monsanto invented and patented a technology to make plants genetically resistant to herbicide glyphosate. All the methods and customary tools employed to endow the plant with the new genetic traits were protected by US Patent 5,352,605 and its re-examined form RE 39,247. The patent covers in particular a glyphosate-resistant soybean plant and its seeds marketed under the Roundup Ready (RR) trademark.

Monsanto conditions the sale of RR soybean seeds to farmers upon a licence agreement which limits their use. Under the agreement, the grower may plant the seeds to obtain only one harvest, and is free to use the harvested plant and the new seeds for consumption or sell them to wholesale food or animal feed dealers. However, the grower is not allowed to save and replant any of the harvested soybean seeds.

Vernon Hugh Bowman is a farmer in the US State of Indiana, and a user of Monsanto's RR soybean seeds. Each season, Bowman buys RR seeds, entering into the licence agreement with Monsanto, and uses them to grow the first crop of the season, all of which he sells. However, since the climatic conditions of Indiana allow Bowman to grow two crops per season, Bowman devises an original procedure to acquire new RR seeds falling outside the agreement with Monsanto. Bowman buys from a grain elevator soybean seeds intended for consumption that are however capable of reproducing a plant if suitably planted and tended. Considering the widespread use of Monsanto RR soybeans in the US, Bowman reasoned that part of the purchased material comes from glyphosate-resistant plants. Bowman plants the material and grows a new crop; in doing so, he treats the plants with glyphosate, thus culling all non-glyphosate resistant plants, while saving the considerable percentage of RR genetically modified and glyphosate resistant plants — obviously allowed under US laws on substances intended for consumption.

From this second harvest of the season, consisting almost exclusively of RR plants, Bowman saves the seeds he needs for the next season's second harvest. This practice, repeated for at least eight seasons, allowed the farmer to save a considerable amount on licensing fees.

After discovering this practice, Monsanto sues Bowman for patent infringement, and its claims have now been consistently upheld in three instances.
Bowman defended his practice by invoking patent exhaustion, since the RR soybean seeds had been purchased not from Monsanto but from a grain elevator and therefore did not fall under the licence agreement terms imposed by Monsanto.

Bowman also claimed that the nature of the patented matter — which in the case of a plant is self-replicating — requires a specific exception to the principles of patent law normally applied, since the reproduction of the plant and therefore of the seeds from the patented material is formally due to the plant's autonomous ability to reproduce rather than to the grower's contribution.

## 2. US Supreme Court Judgment

For a patent attorney well-versed in life science technology, the US Supreme Court's judgment comes as no surprise, and not only because the well-grounded decisions of the two first instances had consistently found infringement of Monsanto's rights, but mostly because the same conclusions would very likely have been reached by any court in Europe or in any country whose legal system provides patent protection for living matter through specific provisions.

## 3. Patent Exhaustion

The exhaustion of patent rights upon selling the patented object is a principle underlying the very concept and logic of patent protection. A patent confers a right that justifies a fair compensation for the inventor and holder of the patent for making the invention available to the public.

When the object of the patent is marketed, the sale price paid to the patent holder exhausts the duty of the public (specifically, of the purchaser) to recognise such a compensation to the patent holder. The same is reflected in the symmetrical exhaustion of the patent rights on the object.

This means that the purchaser of the patented object may use the object at will, with no interference on the part of the patent holder, meaning that he will be able to use it himself or sell it, even at a profit.

It is important however to make clear that the exhaustion of the right does not apply to the patented object as an abstract category, family or group, but concerns only the specific object, individually and concretely sold.

The doctrine of patent exhaustion sets only one (logical) limit. The purchaser of the patented article is not authorised to (re)produce any copies of it and use them. Indeed the reproduced copy is not the article sold by the patent holder (or assignee), but a duplication of that article. Therefore the patent exhaustion principle cannot apply to such a copy since the buyer has not paid any economic compensation for that copy to the patent holder.

Indeed unsurprisingly, the decision of the US Supreme Court confirms that Bowman was free to use and even resell the RR soybean seeds purchased from Monsanto or from a grain elevator, but had no right to “construct an essentially new article on the template of the original, for the right to make the article remains with the patentee.”
The Supreme Court underlined that if the purchaser had a right to make infinite copies of the article sold, the right conferred by a patent would not extend for 20 years but for only one transaction.

However, the prohibition against reproducing patented objects, unless mitigated by reasonable exceptions, would lead to the extreme situation of making any agricultural practice, even the most traditional, impossible. Indeed farmers normally buy seeds (sometimes patented) and use them to grow a plant which in turn produces new seeds. However, neither the plant (most likely also patented) nor the new seed is the object bought by the farmer. Therefore the natural use of seeds purchased on the market would automatically lead to the infringement of the patent right on the plant and seed.

In the specific case of Monsanto's RR soybean, and in the specific context of the US, the situation is mitigated by the licence agreement offered by Monsanto to the buyers of RR seed. Such an agreement enables the farmer to use the seed to obtain one, and no more than one, harvest. In other words, in derogation to the general principle that forbids the reproduction of the patented object, Monsanto authorises the farmer to plant the RR seeds, reproduce a RR soybean plant which reproduces the one covered by the patent and to gather from that plant new seeds/sprouts, which can then be freely sold for human or animal alimentation or sold to grain elevators (again for consumption), all of this however for only one reproductive cycle and one harvest only.

The meaning of such licensing agreements with Monsanto was assessed, albeit obiter dictum, in footnote 3 of page 6 of the Supreme Court's judgment, in which the judges point out that they are not confronting “a case in which Monsanto (or an affiliated seed company) sold RR to a farmer without an express license agreement” authorising the farmer to use the purchased material. Yet according to the judges themselves, “the farmer might reasonably claim that the sale came with an implied license to plant and harvest one soybean crop”.

## 4. European Situation

The above mentioned circumstances, which derive directly from US laws and that, absurdly, necessarily require a private agreement to authorise the use of biological matter planned and sold for that very specific use, are regulated differently in Europe by Directive 98/44/EC and by the national laws implementing the Directive's principles set into national legislation of European Union Member States.

Indeed Article 10 of the European Directive provides that:
“The protection referred to in Articles 8 and 9 shall not extend to biological material obtained from the propagation or multiplication of biological material placed on the market in the territory of a Member State by the holder of the patent or with his consent, where the multiplication or propagation necessarily results from the application for which the biological material was marketed, provided that the material obtained is not subsequently used for other propagation or multiplication.”

It is significant that this provision precisely matches the conditions of the licence agreement imposed by Monsanto to buyers of RR soybean seeds, leading to the conclusion that in Europe certain agreements would be unnecessary, if not perhaps against the law.

The circumstances underlying the US Supreme Court's decision stimulate further reflection, for instance that the principle of “non-exhaustion of patent rights” on the reproduced copies of patented objects stays valid regardless of the number of sales that occur between the patent owner and the final buyer. Indeed the soybean seeds came into Bowman's possession after three sales: from Monsanto (or its distributor) to several farmers, from the farmers to the grain elevator and from the grain elevator to Bowman. Nonetheless, the Supreme Court reaffirms Monsanto's unaltered right on every reproduction of RR soybeans and its seeds.

A second consideration is that, the prohibition against reproducing the object of the patent is completely independent from the fact that such an object is endowed with autonomous reproductive capacity, since this capability, to be expressed, still needs human intervention, as underlined also by the Supreme Court's judgment.

## 5. Farmer’s Privilege

Bowman's strategy was criticised by the Supreme Court not only because it was grounded on a specious interpretation of patent exhaustion, but also because of Bowman's attempt to justify his actions on the grounds of farmers' privilege, which unfortunately is not provided for by the US Patent Act.

Farmers' privilege is an exception to the plant breeder's right granted by the International Union for the Protection of New Varieties of Plants (UPOV) and by the national laws of UPOV member states implementing UPOV rules.

Such a privilege is an exception to the legitimate rights of the holder of a certificate of protection for a plant variety (the breeder). The grower who has purchased seeds of a protected variety maintains the right, within reasonable limits and subject to several conditions, to use on his land for reproduction or multiplication purposes part of the reproduction material saved from growing the plant variety. The reproduction material can be used for planting a new crop.

This exception has been provided for both in the US Plant Varieties Protection Act (PVPA) and in the EU's Regulation 2100/1994/EC (Article 14). It has also been (exceptionally) included in the EU's patent system through Directive 98/44/EC, Article 11(1) of which includes the same provisions as that of Article 14 of Regulation 2100/1994/EC. Not so for the US patent system, whose Patent Act does not provide for any exception to the rights of the holders of patents for inventions in the plant kingdom.
This aspect (or limitation) of the US patent system was mentioned in the Supreme Court's decision, in which it is reaffirmed that the Patent Act, unlike the PVPA, includes no exception that justifies the saving of patented seeds from one harvest for the next.
For this reason, since the Patent Act is the origin of the rights actioned by Monsanto against Bowman (US Patent 5,352,605 and its re-examined form RE 39,247), Bowman had no grounds to invoke farmers' privilege to justify the saving of RR soybean seeds purchased from a grain elevator and reused from one harvest to the next.

## 6. Back to Europe

Even in a European setting, where the patent system includes farmers' privilege, Bowman would still fail in invoking that exception against Monsanto's exclusive rights, for two reasons.

First, because Article 14 of Regulation 2100/1994/EC, to which Article 11(1) of Directive 98/44/EC makes reference, confines the application of farmers' privilege to limited and set types of plant varieties (fodder plants, cereals, potatoes, oil and fibre plants) which do not seem to include soybeans.

Second, Article 14 of Regulation 2100/1994/EC subordinates the exercise of the privilege to the payment of an equitable remuneration to the holder, except for “small farmers”, growing on limited expanses of land. Bowman did not pay any remuneration to Monsanto for the saving and reusing of RR seeds. Neither could the stretch of land farmed by Bowman (some 300 acres) qualify him as a “small farmer” within the meaning of the Directive.

## 7. Self-Replicating Nature of Vegetable Matter

One final argument for Bowman's defence was based on the special nature of “live” vegetable matter, that is capable of autonomous reproduction and therefore requires special rules and exceptions to the rights conferred by a patent. With reference to plants' self-replicating capability, Bowman argued that the reproductive action of RR soybean seeds was formally attributable to the plant, not the farmer.

Such specious arguments were rejected by the Supreme Court judges, who objected that Bowman had not merely been a passive observer of his soybeans' multiplication and that, without his substantial contribution, the seeds would not have spontaneously created eight successive crops of RR soybean.

Bowman was right however in demanding specific rules and exceptions for patents on living matter. Yet, these exceptions already exist in law, at least in Europe, and Articles 10 and 11 of Directive 98/44/EC are valid examples, if not the only such.

In conclusion, the US Supreme Court judgment, although not very surprising, remains an important piece of case-law confirming the reasonable harmonisation already existing between the US and EU systems in the delicate field of living matter as an object of intellectual property rights.

This article was first published by World Intellectual Property Report, 19 June 2013.