

The Unitary Patent system and patents on seeds and animals

technical backgrounder, Christoph Then for no patents on seeds, August 2012

Introduction

The European Union is about to adopt a new EU wide patent system. The aim is to create so-called "unitary patent protection" (http://eur-lex.europa.eu/LexUriServ.do? uri=COM:2011:0215:FIN:EN:PDF)

Similarly to the controversial treaty called ACTA, the Unitary Patent system does not aim to create new regulations on what can be patented or not. It introduces new elements stating how to examine and grant patents and how to enforce them. It also sets certain limitations to the legal power of patents.

The Unitary Patent and the Resolution of the European Parliament of May 2012

It is necessary to take a closer look at the impact of the Unitary Patent on farmers, breeders, food producers and consumers. Patents on plants and animals are a controversial issue within the EU. In May 2012, the EU Parliament adopted a resolution "European Parliament resolution of 10 May 2012 on the patenting of essential biological processes" that calls for the exclusion of patents on plants and animals derived from conventional breeding.¹

Furthermore, according to its resolution, the European Parliament demands a comprehensive breeders' exemption:

"Calls on the Commission and the Member States to ensure that the EU will continue to apply a comprehensive breeders' exemption in its patent law for plant and animal breeding"

This breeders' exemption is especially relevant in the context of the Unitary Patent and not only important for breeders. The Unitary Patent explicitly deals with the "Limitation of the effects of the European patent". Thus, the breeders' exemption has to be integrated into the Unitary Patent if the resolution of the European Parliament is to be taken seriously.

The effect of patents on seed markets

Patents are a new element in the breeding of plants and animals in Europe. Until some years ago, they were only very rarely used. But patents have now been introduced into the seed sector in the context of genetic engineering. Agrochemical companies such as Monsanto, Dupont and Bayer pushed strongly for patents on plants and animals. In contrast to traditional breeders, these companies have enough resources to be familiar with the expensive and tricky system of patents, and they have used patented genes inserted into plants to acquire patent monopolies on seeds, plants and harvests.

Agrochemical companies are nowadays the biggest global seed producers. They have purchased

^{1 &}lt;u>www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+TA+P7-TA-2012-0202+0+DOC+XML+V0//EN</u>

many of the traditional breeders and are filing patents on all kinds of genetic material. Monsanto has gained a global market share of around 25%. It is the biggest seed company worldwide.

Only big companies can survive in the patented seeds market since it takes enormous financial resources to apply and enforce patents, and to participate in lengthy and costly legal procedures to defend monopoly rights. It is assumed that Monsanto spends more money on securing its intellectual property rights than for Research and Innovation in breeding². On markets in which almost only patented seeds are available (such as the US), traditional and medium sized breeders are pushed out of the market or bought up by bigger companies. Above all, this system involves a reduction of farmers' choices, due to the reduced competition between breeders and an increase of prices for seeds. Patents are also an obstacle to innovation, because access to genetic material needed for further breeding can be hindered or even blocked. Naturally, this has a major impact on the whole process of food production, from the farmer to the consumer.

Effects of the plant variety protection (PVP) system on the diversity of breeders

The plant variety protection (PVP) system gives the breeder an exclusive right to sell the new varieties he has registered. But at the same time PVP law functions as an open source system that gives access to genetic material needed by other breeders to create new varieties. And, if new varieties are created and registered, they can be directly marketed, independently of the agreement of the holders of PVP rights of the parent variety. In comparison, patents are very different. They can be used to block access to patented genetic material and if new varieties are created, they cannot be sold without consent of the patent holder - at least as long as they contain any patented genetic material.

The PVP system is far from perfect. It has several negative effects when it comes to farm saved seed, the restrictions regarding the seeds that can be registered and the costs of registration for varieties. However, in regard to a competitive seed market it has some advantages. In markets such as those in Europe where we have the plant variety protection (PVP) system, there is still a much larger variety of smaller and medium size breeding companies and much more competition than in markets relying on patents. This system also seems to be more favourable to innovation. For example, breeding new wheat varieties is more successful in Europe than in the US, if yields are compared.

This is why the European Parliament's demands "that the EU will continue to apply a comprehensive breeders' exemption in its patent law for plant and animal breeding" is very important. It should be noted that this demand not only refers to plants, but also to animal breeding.

The Proposal of the Commission

Under the new patent regime of the Unitary Patent, the Commission has not included a breeders' exemption. In its draft, the Commission only proposes some narrow exemptions for farmers (Article 8): The farmers' privilege as established under European PVP law is mentioned. Further, the Commission proposes that for livestock, the farmer should be allowed to sell products like milk and meat, but not allowed to sell his animals for the purpose of further breeding if the patent holder objects. Presently, farmers can also to sell animals' offspring for further breeding as part of their business. According to this proposal, the limitations for farmers producing livestock would be

² Louwaars N., Dons H., Overwalle G., Raven H., Arundel A., Eaton D., Nelis, A., 2009, Breeding Business, the future of plant breeding in the light of developments in patent rights and plant breeder's rights, University of Wageningen, CGN Report 2009-14 (EN) CGN Rap, http://documents.plant.wur.nl/cgn/literature/reports/BreedingBusiness.pdf

further narrowed:

"Such use includes the provision of the animal or other animal reproductive material for the purposes of his/her agricultural activity, but not the sale in the framework of or for the purpose of commercial reproductive activity."

As a result, the Unitary Patent would have no breeders' exemption and it foresees exemptions in the field of animal breeding (which are relevant for farmers and breeders). Neither does the Unitary Patent introduce something like a reversed burden of proof in cases of contamination if patented seeds are introduced into farmers' fields by contamination. If this version of the Unitary Patent were to be adopted it would eliminate all existing national regulations such as a "Percy Schmeiser clause" which is part of the German Patent law.

The proposal of the Rapporteur of the EU Parliament

The report of Mr. Rapkay, as presented in European Parliament, tries to amend the Unitary Patent system in order to introduce <u>breeders' exemption to allow access to biological material</u>:

"The use of biological material for the purpose of breeding, discovering and developing any new plant variety."

However, the text as proposed does not follow the resolution of the European Parliament of May 2012. Experts call this proposal a "limited" breeders' exemption. Accordingly, the breeders' exemption would apply to access to biological material. But a comprehensive breeders' exemption not only guarantees free access to breeding material but also free commercialisation of the resulting plants.

Why a comprehensive breeders' exemption for plants and animals is needed

Without the possibility of marketing new varieties independently of the patent holder, there is no legal clarity, especially for small and medium sized breeders. They would continually face the threat of the patent holder claiming the successful outcome of their breeding efforts. In addition, farmers, food producers and consumers would be affected by the current development of market concentration that allows a few companies to take control of the market for seeds and breeding. In the long run, we all will have less choice and pay higher prices.

Furthermore, the planned regulation leaves animal breeding completely aside. This is worrying since many farmers are still actively participating in animal breeding. Especially dairy farmers not only produce milk, but also animals for breeding. Similarly in pig breeding, there are regional organisations producing not only meat, but also active in breeding.

The proposal made by the rapporteurs is largely influenced by the position of the European Seeds Association (ESA). This umbrella organisation also represents the interests of large international companies such as Monsanto, Syngenta and Pioneer, all of whom pushed hard for the adoption for their own particular interests. But the text does not represent the interests of smaller and medium sized breeders. Their interests are much better represented in the proposal of the Dutch breeders' association Plantum, which demands integration of a full breeders' exemption into the Unitary Patent system. However, it looks as though the Plantum demand has been overruled within ESA by the interests of the big agrochemical corporations.

If small and medium sized breeders in Europe are to survive, they will definitely need a *comprehensive breeders'* exemption.

Demands

The Green Group in the European Parliament has already tabled an amendment that could help to solve the current problems. According to their proposal, the following limitation should be established within the Unitary Patent system:

"The use of the biological material for the purpose of plant and animal breeding, discovering and developing new varieties and their commercialisation."

Besides this amendment, further possibilities for better protection of the interests of farmers, consumers and food producers should be discussed. As experience with patented seeds in the US shows, farmers in particular need protection from the patent claims of the international patent holders.

More infomations: www.no-patents-on-seeds.org; comtact: info@no-patents-on-seeds.org.