

**WIPO-UPOV SYMPOSIUM ON THE CO-EXISTENCE OF PATENTS
AND PLANT BREEDERS' RIGHTS IN THE PROMOTION OF
BIOTECHNOLOGICAL DEVELOPMENTS**

(October 25, 2002)

Session IV: Measures necessary for the balanced co-existence of patents and plant breeders' rights

Moderator:

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Discussion

Mr. Barreto de Castro: When we analyze Article 27.3(b), there is one thing that we do not actually agree: that the patented recombinant DNA are non-biological. In fact, when Jeff Shell and Mark Montague put together the way to do the transformation in the eighties, they used the *Agrobacterium*. The bacteria did it beautifully and that was a very biological way of doing it, except that, we realized that bacteria did not know how to do these transformations on all plants and we had to invent a gun to shoot plant tissues. The transformation method is not however what is patented. What is patented is what is inherited by the plant. The innovative behavior of the plant.

Prof. Joseph Straus: I have the possibility to refer in this context to Carlos Correa who is known to be a very "pro-patent minded" person. He said that all recombinant DNA technology is non-biological and, of course, we have in our Directive a definition of what is essentially biological and essentially biological is only crossing and selection. Fortunately I am not a judge and I have not a case before me, but I would still think that what you have mentioned, e.g. the use of shot gun method or the use of micro-injection, or of other biotech tools then this would really be difficult to define as being a biological process. Maybe in Brazil! Sorry about this, but for the rest, I would say, it would be difficult to call this new technology a biological one.

Mr. Barreto de Castro: Again, it is not the transformation methodology that is patented, it is the trait and the way the plant behaves later.

Mr. Jean Donnenthirth, Pioneer Overseas Corporation, Brussels (American Chamber

of Commerce): My question is directed to Prof. McManis as well as to Prof. Straus. Respective to their views on the freedom offered to WTO members by Article 27.3(b) of TRIPS to achieve a balanced co-existence of patents and plant breeders' rights. I agree that this Article gives WTO members relative freedom to exclude certain inventions from the field of patentable subject matters. However, if a WTO member decides to include, like this is the case in the European Union or the United States, plant related inventions that are new, inventive and useful in the scope of patentable subject matter, it has been so far my understanding that patentees for these sorts of inventions should enjoy the same level of protection as any other inventor in any other field of technology thanks to Article 27.1 of TRIPS. So I would be interested if you might comment on the possible impact of these non-discrimination principles posed by the Article 27.1 of TRIPS on the freedom of WTO members to create derogatory exemptions for plant related inventions.

Prof. Charles McManis: Well, I would mention first of all that Article 27.1 of TRIPS is explicitly subject to the provisions of paragraphs 27.2 and 27.3. So, to the extent paragraphs 2 and 3 take away that which is granted in paragraph 1, it seems to me that this is an appropriate or at plausible reading of the relationship between 27.1 and 27.3. And furthermore, this reading seems to me indicated by the language that I tried to emphasize in my paper and in my oral remarks. I think, it is significant that Article 27.3(b) states that members shall provide for protection of plant varieties either by patent or by an effective *sui generis* system or by any combination thereof. And I think, that the phrase "any combination thereof" basically permits WTO members to mix and match. It does not simply mean you can have both patents and *sui generis*, it seems to suggest you can mix the two, combine some of one and some of the other. Otherwise what does "any combination" mean? If it merely means "or both," why doesn't it simply say "or both?" Now I concede that both of these questions are first order questions of treaty interpretation that must await some WTO dispute panel and appellate body decision, but these are the arguments that are being raised about what this treaty language means and its not obvious to me that it means one thing rather than the other.

Prof. Joseph Straus: Well, to my understanding, as far as patents are concerned, the clear limitation are Articles 30 and 31. I mean, there should be no discrimination as far as patents are concerned. Another question is what does it mean effective *sui generis* or a combination protection? I have published a couple of times my view that UPOV 1978 Act does not really offer an effective protection for new varieties of plants because, it allows to limit the list of protected taxa to 24 only. If I am a breeder of something which is not on the list, can you explain to me that that is an effective protection for me? No. But as far as patents are concerned, I agree that the only limitation and allowed limitations are Articles 30 and 31. And those limitations of the effects of a patent-we have heard this morning about the Bolar provision of the United States Patent Act-if that is allowed, then of course a breeders' exemption should be twice allowed, because it is really something that is bringing forward science and technology and not only reducing the costs of the health care system.

Mr. Bernard Le Buanec: I would like to make a comment on what has just been said by Prof. Straus and what was said also by Prof. McManis. I also personally am convinced that the 1978 Act of the UPOV Convention is not an effective *sui generis*

system, but for two reasons: one is the reason you just indicated and the second one is that there is no limitation for farm-saved seed. So what is the meaning of a protection if your product can be produced by all the farmers in the world and you will not get any return on that. And that leads me to the comment made by Prof. McManis. I am not at all surprised that the Plant Variety Protection Act (PVPA) in the United States was not an incentive for plant breeding, because the PVPA in the US is one of the least effective I know. So this is what I was touching upon in my opening remark of this morning. You have countries with very weak PVP system and, of course, it is because of that weakness that there is no incentive for further breeding.

Mr. Jean-Christophe Gouache, Directeur scientifique, Groupe Limagrain Holding, Chappes, France: I would like, as Mr. Desprez said this morning, to speak also as a user of intellectual property rights. In this debate about the right balance between the patent system and the plant breeders' rights system, I would like to state that, as breeders, we need a strong protection for our creations, but we do need also the access to genetic variability. Today we focussed mainly on the research exemption and limiting the scope of the patent. It seems to me that we did not address one of the key issues, which is the nature of the claims when patents are used to protect plant varieties. It is amazing to read patent applications for plant varieties in the United States. Some 10 to 15 years ago, there were, maybe, six, seven, eight claims. And now you have 20 or 25 claims. It is very demonstrative of the fact that in this business, it is no longer the people from the art which are making the calls, but the lawyers. From a technical viewpoint, some of the items which are claimed are not described any more by the deposit of the seeds of the protected item. A simple fact: The seed deposit of an inbred (or of a hybrid) does not describe in any way the genetic recombinations of an F2 population which would be represented by the kernels of an open-pollinated production field. However, these F2s are claimed in most of the patents awarded for plant varieties. The question concerning the nature of the patent claims will have to be addressed. And we did not do it yet. Moreover, it is one of the biggest issues and challenges for the USPTO in the coming years.

Mr. Joachim Winter, Secretary General, European Seed Association (ESA), Brussels: I would like to ask Prof. Straus whether in elaborating his conclusions, he has had the opportunity to have a look at the opinion as formulated by the European Seed Association, since, in fact what you are putting forward fits absolutely what we are claiming and I congratulate you on that. I would like to add another encouragement to the German Government. That is, following the information delivered by Prof. Straus, aiming at introducing research exemption in the broader sense into their patent laws.

Prof. Joseph Straus: I have not seen that statement and therefore I would claim that it is like in case of copyright! We are independent and I am protected for my ideas and you for yours!

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