

Dr. Stefan Danner  
German and European Patent Attorney  
[stefan.danner@vovo.de](mailto:stefan.danner@vovo.de)

On September 1, 2013, "Dr. Volker Vossius"  
becomes "Zwicker Schnappauf & Partners".

July 2013

## BROCCOLI REHEATED – SECOND REFERRAL TO THE EPO ENLARGED BOARD OF APPEAL

On July 8, 2013, EPO Technical Board of Appeal 3.3.04 handed down the interlocutory decision in case T83/05 (also known as the "Broccoli Patent"), thus referring further questions concerning the patentability of plants to the EPO Enlarged Board of Appeal. (EBA) This second referral is pending as case G2/13. The first referral in this matter resulted in EBA decision G2/07 that had clarified the circumstances under which plant breeding methods are excluded from patentability as essentially biological processes for the production of plants.<sup>1</sup>

The second referral now aims to establish whether plants or plant parts (i.e., edible portions or seed) obtained from non-patentable breeding methods are as such patentable

In response to the second summons to attend oral proceedings the patent proprietor replaced all its requests on file. The new requests did not contain method claims.

Claim 1 of the main request reads:

*An edible Brassica plant produced according to a method for the production of Brassica oleracea with elevated levels of 4-methylsulfinylbutyl glucosinolates, or 3-methylsulfinylpropyl glucosinolates, or both, which comprises:*

*(a) crossing wild Brassica oleracea species selected from the group consisting of Brassica villosa and Brassica drepanensis with broccoli double haploid breeding lines;*

*(b) selecting hybrids with levels of 4-methylsulfinylbutyl glucosinolates, or 3-methylsulfinylpropyl glucosinolates, or both, elevated above that initially found in broccoli double haploid breeding lines;*

*(c) backcrossing and selecting plants with the genetic combination encoding the expression of elevated levels of 4-methylsulfinylbutyl glucosinolates, or 3-methylsulfinylpropyl glucosinolates, or both; and*

---

<sup>1</sup> Cf. the newsletter issue of February 2011.

*(d) selecting a broccoli line with elevated levels of 4-methylsulfinylbutyl glucosinolates, or 3-methylsulfinylpropyl glucosinolates, or both, capable of causing a strong induction of phase II enzymes, wherein molecular markers are used in steps (b) and (c) to select hybrids with genetic combination encoding expression of elevated levels of 4-methylsulfinylbutyl glucosinolates, or 3-methylsulfinylpropyl glucosinolates, or both, capable of causing a strong induction of phase II enzymes.*

Notably, an analogous second referral based on the "Tomato Patent" (case T1242/06 which gave rise to EBA decision G1/08) is already pending at the EBA as case G2/12. On May 31, 2012, the same Technical Board of Appeal 3.3.04 (although in different composition) handed down a second interlocutory decision in which it referred the following questions of law to the EBA:

- 1. Can the exclusion of essentially biological processes for the production of plants in Article 53(b) EPC have a negative effect on the allowability of a product claim directed to plants or plant material such as a fruit?*
- 2. In particular, is a claim directed to plants or plant material other than a plant variety allowable even if the only method available at the filing date for generating the claimed subject matter is an essentially biological process for the production of plants disclosed in the patent application?*
- 3. Is it of relevance in the context of questions 1 and 2 that the protection conferred by the product claim encompasses the generation of the claimed product by means of an essentially biological process for the production of plants excluded as such under Article 53(b) EPC?*

In the "Broccoli" case, the Board initially assessed the requirements of Article 53(b) EPC stating that this provision relates to two exceptions from patentability, plant varieties and essentially biological processes for the production of plants. The Board referred to the proceedings in the parallel "Tomato" case indicating that the exclusion of plant varieties was not considered to be applicable but that the process exclusion might well have an impact on the allowability of the claimed products.

In the present case, the subject matter of claim 1 according to the new main request is defined as an edible *Brassica* plant produced according to a certain method for the production of *Brassica oleracea* with elevated levels of certain glucosinolates (which are anti-

cancerogenic). The method features of this product-by-process claim include steps of crossing and selecting plants.

The competent Board continued to note that apart from the fact that these plants are, in view of the process features of claim 1, defined as the result of crossing specific plant species, they are not further characterized by a multitude of characteristics resulting from a given genotype or combination of genotypes (see EBA decision G1/98, point 3.1 of the reasoning), but only by one particular trait, i.e. an increased level of specific glucosinolates. A single trait is, however, in general not sufficient to define a plant variety without providing, apart from an indication of the species, further adequate information about the actual genotype of the plant grouping. The exclusion of plant varieties does therefore not apply in the present case.

However, as in the "Tomato" case, the Board considered the method claims to be regarded as essentially biological processes for the production of plants, which would fall, if claimed as such, under the process exclusion of Article 53(b) EPC. These claims cover plants being produced by an excluded process. According to established EPO case law, however, the subject matter of a product-by-process claim is not limited to products actually produced by the relevant process but also extends to products which are structurally identical to such products and which are produced by a different process (see EBA decision G1/98, point 4 of the reasoning as well as decision T219/83, point 10 of the reasoning). On the other hand, the patent application as originally filed did not disclose any method for the production of the claimed plants that did not include steps of crossing and selection.

Hence, in view of the principle of absolute product protection (see EBA decision G2/88, point 5 of the reasoning), a claim to a product provides the patent proprietor with protection that generally encompasses the protection provided by a patent claim for the process of making the product (see EBA decision G2/06, point 25 of the reasoning). If the product claims were allowed in the present case, any act of making the claimed *Brassica* plants or plant parts would in principle fall under the prerogative of the patent proprietor. This would have the consequence that the proprietor could prevent others from carrying out the breeding method taught in the description of the patent and referred to in the claims, although this method might be regarded as an essentially biological process for the production of plants and excluded *per se* from patentability under Article 53(b) EPC.<sup>2</sup>

---

<sup>2</sup> Cf. T83/05, point 18 of the reasoning.

The Board further held that the answer to the question as to whether the process exclusion of Article 53(b) EPC has a negative impact on the allowability of the corresponding product claims is decisive for the present appeal. It would be clearly inappropriate for the Board to decide this issue on its own before the EBA has responded to the referred questions in parallel case G2/12. The board can therefore either stay the proceedings or again refer questions to the EBA. In view of the explicit requests for a further referral of all parties involved in the proceedings as well as the second referral in the "Tomato" case the Board decided to opt for the second alternative.

The following questions are referred to the EBA for decision:

- 1. Can the exclusion of essentially biological processes for the production of plants in Article 53(b) EPC have a negative effect on the allowability of a product claim directed to plants or plant material such as plant parts?*
- 2. In particular: (a) Is a product-by-process claim directed to plants or plant material other than a plant variety allowable if its process features define an essentially biological process for the production of plants? (b) Is a claim directed to plants or plant material other than a plant variety allowable even if the only method available at the filing date for generating the claimed subject matter is an essentially biological process for the production of plants disclosed in the patent application?*
- 3. Is it of relevance in the context of questions 1 and 2 that the protection conferred by the product claim encompasses the generation of the claimed product by means of an essentially biological process for the production of plants excluded as such under Article 53(b) EPC?*
- 4. If a claim directed to plants or plant material other than a plant variety is considered not allowable because the plant product claim encompasses the generation of the claimed product by means of a process excluded from patentability under Article 53(b) EPC, is it possible to waive the protection for such generation by "disclaiming" the excluded process?*

Questions 1, 2(b), and 3 are virtually identical to those of the second referral of the "Tomato" case. Question 1 has only been modified to additionally refer to "plant parts", whereas question 2(b) has been amended to encompass "product-by-process claims". A decision of the EPB in the "Broccoli" case is commonly expected to be handed down by mid of next year at the earliest.