

Legal perspectives on Essentially Derived Varieties[∞]

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Abstract: In order to obtain a new plant variety, very often only a single protected variety is utilised as the sole basis for such breeding activities (so-called initial variety). As the breeder of such a new variety basis his work solely on the achievements of the owner of the initial variety, said owner has certain rights with regard to a new breeding result through the concept of the Essentially Derived Variety (EDV). This article discusses questions connected with the EDV concept.

I. Introduction

A plant breeder's right will be granted upon application, if the variety is new, distinct, uniform and stable¹. The distinctness criterion is the relevant criterion in relation to other varieties that are commonly known at the time of the filing for grant of a plant breeder's right². It determines the scope of protection. Distinctness must be established with regard to one or more important characteristics. Any new breeding result which is not clearly distinct from varieties of the same species, with regard to characteristics being the basis for grant of protection, falls into the scope of protection of a protected variety. Thus, the scope of protection of a protected variety depends on the distance which certain characteristics that are relevant to the determination of the distinctness of a variety must keep to be clearly distinct to varieties of common knowledge at the date of its application.

Once rights are granted the scope of the holder's rights are determined by Article 14 UPOV 1991 and Article 13 of Regulation 2100/94. In summary, a breeder's rights in a variety cover the entire field of commercial production and commercial distribution of the

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¹ (Article 5(1) UPOV 1991; Article 6 of Council Regulation (EC) No. 2100/94 of 27 July 1994 on Community Plant Variety Rights)

² (Article 7 UPOV 1971; Article 7 of Regulation 2100/94)

propagating material and, under certain circumstances, of the harvested material and products obtained from harvested material.

On the other hand, any material of protected varieties may be used for the purpose of breeding other varieties, without the possibility of intervention by the owner of the rights in the material used (forthwith called initial variety). As, due to the nature of living material, the breeding of a new variety inevitably requires the use of freely available material, one of the fundamental principles of the plant variety protection system is the breeder's exemption which allows everybody to use plant material released into the public domain, even if the plant material is protected by a PVR. If the use of such material led to a new variety, the rights granted in the same were, up to the 1991 Agreement, totally independent from any rights related to the material used.

In order to balance the interests of a holder of a plant breeder's right and the need to have free access to protected material, safeguarded via the breeder's exemption, the UPOV Convention 1991 introduced the concept of EDV. It extends the scope of rights of a PVR owner to new varieties created by third parties by making the commercialisation of such new varieties dependent upon the consent of the owner of the initial variety. As will be shown in this article, due to its wording it remains controversial to this day. While in the interim the UPOV has passed guidelines for the interpretation of Essentially Derived Varieties³, uncertainties still remain concerning what must be regarded as an EDV. For this reason, this article tries to shed some light on what an EDV may be, as the wording of the relevant legal provisions cause great uncertainty.

II. Background of the Introduction of the EDV Concept into UPOV 1991

The EDV concept lies in the area of conflict between sufficient scope of protection for a new breeding result and the principle of independence (breeder's exemption), which is one of the main principles in the plant variety protection system.

As the distinctness criterion can usually be easily fulfilled due to minimal distances and, moreover, in many instances the development of something distinct to fulfil

³ UPOV/EXEN/EDV/1, dated 22 October 2009

the uniformity and stability requirement may not go beyond the average ability of persons skilled in the art of breeding, the scope of protection of a PVR appears to be rather limited. This is emphasised by the fact that Art. 1 of the UPOV Convention defines, in No. IV, a breeder as being not only the person who has created but also somebody who has discovered and developed a variety. Thus, even spontaneous mutation of a protected variety may be open for protection in favour of its finder.

Moreover, due to the breeder's exemption, any plant material which includes that of protected varieties available on the market may be used for breeding purposes. Due to the nature of living material, something new - in the sense of the protection system - may be created without too much intervention by man. In these cases it may not be fair in all circumstances to unconditionally attribute rights in such new plant material produced by nature's capriciousness solely to the breeder, without participation of the breeder of the material used from which something new has emerged.

It is evident that such an unconditional exemption, as the right to use protected material to create new varieties, greatly restricts the value of an exclusive right, such as a plant variety right, in particular in cases in which a person makes use of protected material without having to invest time and money, as the material, as such, creates something distinct by its nature rather than by the intervention of man, thus exploiting the investment of the breeder of the initial plant material. One must take into account that the initial material used is very often the breeding result which involves extensive time and monetary investment by the breeder of the initial variety. If such material can be used by other breeders - without equal substantial time and financial investment - to produce a variety which, as such, is protectable since it fulfils the DUS requirements, such a breeder bases his activities solely or mainly (predominantly?) on the time and monetary investment by the breeder of the initial variety.

In addition to these two aspects in the PVP system, restricting the value of PVRs significantly, possible claims by patent owners for gene and gene combinations introduced into material of protected varieties, causing a one-sided dependency of breeders, were the motives for introducing the EDV concept.

III. Aspects to be observed in the interpretation of the legal provisions on EDV

1. The justification for grant of an exclusive right for a limited duration lies in the enrichment of society, achieved by the creativity and investment of the person who created something new. Thus, the scope of an IP right is not only determined by the value of intervention but also by the extent of the finder's contribution to foster the further development of society. If one applies these conditions to plant breeding, one must bear in mind that - in contrast to "dead" material which is the object of technical inventions - one must always use plant material that is available on the market, being the result of more or less inventive actions of other parties. The value of a breeding result which comes into existence without much intervention by its creator does not deserve the same scope of freedom to use said working result as the breeding result of a person who invested time and money in creating something new. Therefore, a party who has created an EDV does not have rights against another party who obtained from that EDV a further EDV. Moreover, the freedom to commercialise an EDV is restricted by the rights of the holder of the initial variety as regards commercialisation of the EDV.
2. It is essential to note that the provisions related to EDVs are listed under Chapter V of UPOV 1991, headed "Scope of the Breeder's rights". This indicates that what has to be regarded as an EDV falls into the scope of rights granted to the holder of the rights to the initial variety. For this reason it is dependent on those rights to a certain extent, however, without restricting the breeder's exemption fundamental to the system. Thus, any activities with a breeding result essentially obtained from a protected initial variety which endanger the commercialisation possibilities of the owner of the initial variety, have to be regarded as dependent on his consent, whereas any activities to be regarded as activities in developing a new variety such as crossing, but also testing to ascertain whether it could already be used for marketing or whether it still has to be improved for later marketing, fall under the breeder's exemption, excluding any intervention possibilities by the owner of the rights to the initial variety.

3. On the other hand, one has to bear in mind that the scope of protection is determined by the characteristics which are the basis for grant of protection of a new variety. Consequently, such characteristics are of decisive importance in judging whether a new variety has to be regarded as an EDV. Extending the rights of an owner of an initial variety, regardless of how many distinct additional characteristics the new variety has, simply because it has been obtained by using one initial protected variety, would extend the scope of protection of a protected variety far beyond the scope determined by the characteristics, which was certainly not the intention of the legislator. As becomes evident from the preparatory documents for the 1991 UPOV Convention, one of the main aims of the introduction of the EDV concept was to diminish the problem of plagiarism. Plagiarism, however, occurs only if the contribution by a breeder of a new variety is mainly based upon the work of the breeder of the initial variety, not contributing something essential which would justify total independency of the new breeding result from the initial variety.

IV. What is an EDV?

1. The wording of the provisions on EDVs has been criticised as difficult and complicated. The essential concept is: a breeder basing his activities to create a new variety mainly on the working result of another breeder cannot exploit his achievement solely to his advantage, unless the breeder of the initial variety receives his share, whereas the holder of an EDV may obtain a PVR if it satisfies the DUS requirements. This seems to be a fair balance of interests of both parties involved: on the one hand the need of the breeder of the EDV to seek the consent of the owner of the initial variety for any marketing activities and direct preparatory activities as defined in Art 14 (1) UPOV 1991 and, on the other hand, the EDV breeder's right to a PVR on its own which may be exercised/enforced against third parties which make use of the EDV without his consent when he has obtained a PVR.

If one looks at the wording of the legal provisions, the following terms are decisive for the judgement of whether a new variety is an EDV:

- **Predominantly** derived
 - from the initial variety with regard to which **a right has been granted**, or
 - from a variety which itself is a derivation of a protected variety

- **Distinctness** from the initial variety, whereas the distinctness is the **result of the act of derivation**

- **Conformity**, essentially with the initial variety, in the expression of characteristics **that result from** the genotype or a combination of genotypes of the initial variety

Dependency can only be given in relation to one protected variety (see wording of Art.14 (5)(a)(i) UPOV 1991): essentially derived from **the** protected variety). As the application for grant of a PVR already creates a contingent right (*Anwartschaftsrecht*) if it fulfils the DUS requirements, an applied-for variety needs to be regarded as protected in the sense of the EDV provisions. Thus, use of material of a variety at the time protection was applied for creates dependency, if the applied-for right will be granted.

2. Does use of **one** protected variety always lead to an EDV regardless of the contribution of the breeder in developing it further into a new variety? It seems that this is suggested by the EDV provisions. If the extent of contribution by the breeder of the EDV would be of relevance, it would be next to impossible to determine, by objective criteria, the threshold as to when his contribution makes the result a new variety on its own.

It appears that no predominant derivation can be given in cases in which two varieties are crossed. Both parents equally influence the population resulting from the crossing, even if the new variety shows essential conformity in the expression of characteristics with one of the two parents. It should be without any doubt that at least also sister-lines emanating from a population caused by crossing cannot be essentially derived from each other.

Bearing the foregoing in mind, the controversial battleground of the EDV concept is proof of the criterion “essential conformity” with the initial variety.

3. From the wording of the EDV provisions, it follows that the characterisation as an EDV is mainly determined by the genotype rather than by the phenotype. As the distinctness requirement does not ensure sufficiently broad protection in cases in which the breeder of a new variety has built his contribution to create something new mainly on the investment of the breeder of the initial variety, it is the genotype comparison established as one of several conditions which qualify a new breeding result as an EDV. However, distinctness in the phenotype still has an important role, as the derivation must

- **conform essentially** to the initial variety
- in the **expression of characteristics**
- that result from the genotype or combinations of genotypes **of the initial variety,**

except for the differences which result from the act of derivation.

To my understanding it is, to a wide extent, yet unknown which genes or combination of genes are responsible for certain phenotypical characteristics. Thus, the phenotype retains its indicative function as long as it is not possible to prove

that a certain gene or combination of certain genes is responsible for certain characteristics in the phenotype. Even then, it is most doubtful whether solely genotype conformity is sufficient to qualify new breeding results as an EDV since, as becomes apparent from the above extract of the legal provisions, in this concept the phenotype is, at least, of equal importance. Thus, it is the phenotype which must give a first indication, allowing one to conclude (not to speculate!) that the new breeding result may be a derivation in the meaning of the EDV concept. The owner of an initial variety is obliged to prove that, due to certain common characteristics unique to the initial variety, the new variety is an essential derivation of his protected variety. If he cannot establish evidence that the characteristics of the new variety have been derived from the same, in which it essentially conforms to the initial variety, he must at least prove that, to a wide extent, the new variety is identical to those characteristics which qualify the initial variety as an outstanding or remarkable new breeding achievement. Therefore, the decisive question is what essential conformity means.

4. With all probability, essential conformity is regularly given with regard to new varieties that encompass the same characteristics of a known variety, which qualify that variety as something really new. Let me give you a few examples for purposes of illustration:
 - a *Calluna vulgaris* variety, which is the first with white flower buds.
 - an *Osteospermum* variety, which is the first of such species which does not need a cool period during summertime to gain forces to develop the full flower bouquet, for a second time.
 - a *Leucanthemum x superbum* variety, being the first variety of such species which is characterised by lateral flower stems.
 - a grape variety, which is the first without seed kernels.

If in any such cases a new variety appears showing this unique character, whereas distinctness is founded by any other characteristic common for certain other varieties of this species, it would be a strong indication that it is an EDV.

In all other cases the existing differences must not be so significant that an expert must conclude that the variety was bred independently. If there exists for an expert the likely possibility that, despite the differences in the phenotype, mainly material of the initial variety had been used, the owner of the initial variety should have fulfilled his burden of proof. It is then incumbent upon the owner of the assumed EDV to establish counterproof.

5. The statutory definition determines that the substantial concurrence in the protected characteristics must be caused by the genotype or combination of genotypes of the initial variety, that is they must originate in the genes that constitute the morphological and physiological basic structure of the relevant plant material and determine the outer appearance of the initial variety (phenotype). Where substantial concurrence in the phenotype exists in the plant material in question, it is generally to be assumed that it stems from the same genotype.

The question of genetic conformity becomes relevant only when it is clear that the outer appearance, i.e. phenotypic characteristics, is of such similarity to the protected variety that a predominant derivation is likely. In such a case, apart from the question of whether the deviations in the phenotype are within the tolerable thresholds for the relevant type, crucial to being able to speak of genetic conformity are the varieties, and the characteristics of said varieties, from which the deviating plant material emerged. This will force the holder of the assumed EDV to reveal the origin and basis of the breeding achievement.

The defendant frequently attempts to defend himself by stating that the disputed plant material resulted from his own breeding activities in which his own plant material was used, not that of a protected variety. An independent breeding result requires a systematic approach to the breeding process, thus making it possible to retrace in detail the variety from which the independent breeding result was

achieved. In order to be able to comprehend the conclusiveness and accuracy of the relevant defence arguments, the defendant must provide substantiated submissions and evidence. This defence may be disregarded if there is a lack of any such submissions. On the question of whether it is a derived variety, the examination of the criterion “differences which result from the derivation” is possible only through facts available *exclusively* to the person claiming to be the breeder of the variety that is not derived from a protected variety. Only he knows how the new variety was achieved. For this reason, the absence of this criterion must be explained and proven conclusively by the defendant. In the pertinent submission it will be necessary to demonstrate in detail which breeding program was used and how the process was applied. The frequent assertion by infringers, in particular in cases of vegetatively propagated plants, that the new variety resulted from seedlings of their own plant material, would not suffice.