

## **PROTECT YOUR TURF – Intellectual Property Protection for Plants by Patricia A. Olosky**

In the United States, there are a number of ways to protect your turf. The most common protections sought by members of the plant community are briefly discussed. A plant variety may be protected by a plant patent if it is reproduced vegetatively, by a Plant Variety Protection Certificate if it is reproduced by seeds, and/or by a utility patent regardless of how it is reproduced. Trademark protection may also be sought for a plant, series of plants, or services related thereto.

### **Plant Patents: Vegetatively Reproduced Plants**

The Plant Patent Act (35 U.S.C. §§ 161-164) authorizes the United States Patent and Trademark Office (USPTO) to issue plant patents to protect novel varieties of asexually reproduced plants via stem cuttings, tip cuttings, or the like. A plant patent protects a single variety, sport, mutant, or hybrid plant. Tuber-propagated plants and those found in an uncultivated state are not eligible for plant patent protection. A plant patent entitles the patent holder to exclude others from asexually reproducing, using, selling, or offering to sell the plant variety and any parts of the plant. Protection extends for twenty years from the date that a plant patent application is filed. There are no annuities or maintenance fees required for plant patents.

A plant patent application must include at least one photograph of the new variety and a detailed botanical description of the plant. The botanical description recites the genus, species, varietal name, and method of asexual reproduction of the new variety. A comparison between the new variety and its parental cultivars, if they are known, must also be given. Further, a listing of how the new variety is similar to and differs from at least one other variety of the same species known to the inventor should be stated. A description of the plant and its important parts, such as the growth requirements or characteristics, plant form, bark, buds, blossoms,

foliage, reproductive organs, and/or fruit, should be disclosed. Numerical measurements should be used to describe relevant parts of the new variety and color measurements of such parts should also be listed using a standardized color chart, such as the Royal Horticultural Society Colour Chart. Any additional characteristics, such as fragrance, taste, disease resistance, temperature tolerance, productivity, precocity, and vigor, should be described, if applicable to the plant of the application.

The novelty standards for a plant patent are strict and prohibit the following activities anywhere in the world more than one year before the application filing date: (1) sale, offer for sale, or public use of the plant or (2) description of the plant in a printed publication combined with public availability of the plant. A plant eligible for plant patent protection may be a plant that is naturally occurring, provided that it is found in a cultivated state and the discoverer (inventor) asexually reproduces the plant. The plant for which protection is sought should differ from known plants of the same type in at least one distinguishing characteristic that is not attributable to growing conditions or the like, and must also not be obvious to one of ordinary skill in the art. The plant itself is not submitted, and there are no testing requirements.

#### Plant Variety Protection Act: Seed and Tuber-Propagated Plants

The Plant Variety Protection Act (PVPA) (7 U.S.C. §§ 2321 *et seq.*) authorizes the United States Department of Agriculture (USDA) to issue Plant Variety Protection Certificates for the protection of novel varieties of sexually reproduced or tuber-propagated plants. The USDA and the USPTO are separate entities of the Federal government of the United States, having essentially no contact between one another. To be eligible for protection, the plants must be new, distinct, uniform, and stable. A Plant Variety Protection Certificate entitles the Certificate holder to exclude others from selling, offering for sale, importing or exporting, sexually reproducing, tuber-propagating, or using the protected variety to form a hybrid. In most cases, this protection lasts for twenty years from the date that a Certificate is granted. The term of protection is twenty-five years for

novel varieties of trees, shrubs, or vines. There are no annuities or maintenance fees associated with Plant Variety Protection Certificates.

A PVPA application must include a statement of the distinctiveness of the variety, the breeding history of the variety (related to uniformity and stability), an objective description of the variety, the basis of ownership of the variety, and a declaration of seed deposit. With regard to the distinctiveness of the variety, the applicant must identify the most similar comparative variety, must identify the distinctive traits in a clear and thorough manner, and must provide evidence that the differences between the claimed variety and other varieties are clear, stable, and uniform through at least two to three generations of statistical evidence. Typical comparisons include similarities and differences in color, shape, quantitative traits, and disease susceptibility. For breeding history, the applicant must disclose the genealogy of the variety back to any publicly known varieties or lines, must include the breeding method and the stages of selection and multiplication, and

provide a statement of genetic stability showing the number of cycles for which the variety has remained unchanged in its distinguishing characteristics. Any genetic variants (and the number thereof) observed during reproduction must also be identified. Standard forms for a PVPA application may be found at the Agricultural Marketing Service website at [www.ams.usda.gov](http://www.ams.usda.gov). The PVPA deposit requirement mandates a deposit of 3,000 untreated, viable (85% germination or better) seeds for the variety for which protection is sought. Before a PVPA application issues, the varietal name must be cleared by the Seed Regulatory and Testing Branch of the PVPO to ensure that the name is not confusingly similar to any other varietal names.

The definition of novelty under the PVPA differs slightly from the definition of novelty utilized in patent regimes in that a variety is considered novel if it has been on sale for less than one year in the United States or less than four years for most varieties in another country of the International Union for the Protection of New Varieties of Plants (UPOV); however, there is a six-year provision for tree or vine varieties. The variety must

also be distinct, or distinguishable from other known varieties, and uniform. In other words, any variations of the variety must be describable, predictable, and commercially acceptable; and the variety must be stable; and thus its essential and distinctive characteristics must remain unchanged through propagation, or any variations must be commercially acceptable.

#### Utility Patents: Any Type of Plant or Plant Parts/Methods

Protection for both asexually and sexually reproduced plant varieties can also be obtained with a utility patent, the requirements of which are detailed in Title 35 of the United States Code (35 U.S.C. §§ 1 *et seq.*). The protection afforded by a utility patent is substantially stronger and broader than that available through the Plant Patent Act and the Plant Variety Protection Act. Utility patents can be used to protect novel plants, seeds, plant cells, plant parts, fruits of plants, and plant tissue cultures for a period of twenty years from the date that an application is filed. Utility patents can also be utilized to protect methods of producing plants, such as methods utilizing techniques associated with molecular genetics. Although a plant patent and a Plant Variety Protection Certificate are each limited to a single variety, a utility patent can cover multiple varieties, provided that they have the characteristics set forth in the patent claims. Maintenance fees must be paid at designated time intervals to keep a utility patent in force.

In addition to requirements of novelty and nonobviousness, utility patent applications directed to plants must also satisfy all of the other provisions of the United States Patent Act, including that the application meet the written description and enablement requirements. That is, the application must show that the inventor was “in possession” of the invention at the time of filing (that the invention is described in such terms that it is clear that the inventor or applicant was aware of and could describe the defining, novel, and nonobvious characteristics of the invention), and that the disclosure of the application would enable one of skill in the art to make and use

the claimed invention. With regard to plant protection, the specification must describe the plant with particularity, including how the plant was made, the effect of any genetic manipulation on the characteristics of the plant (phenotype), the genetic makeup of the plant (genotype), or at the very least the genetic makeup of the area of the plant genome that is modified, including nucleotide and, if applicable, amino acid sequences if the claimed, modified plant has an alteration in a protein. In the United States, a deposit of seed and/or cuttings under the Budapest Treaty with an approved depository, such as the American Type Culture Collection (ATCC), may satisfy both the written description and enablement requirements. The ATCC provides a simple step-by-step process for inventors for making deposits, and it is recommended that deposits be made in any situation where a utility patent is sought on a plant. However, the deposit is not a substitute for providing as much detail as possible in the specification of the application, including a description of the methods of obtaining the plant and phenotype and genotype information.

The requirements for obtaining a utility patent for a plant are significantly more stringent than that needed for other types of protection. A threshold issue is that a utility patent cannot be obtained on an item that is naturally occurring. In the United States, the claimed invention must have utility, novelty and be nonobvious over that which came before. Specifically, an invention will be patentable unless the claimed invention was patented, described in a printed publication, or in public use, on sale, or otherwise available to the public before the effective filing date of the invention, except for a one-year grace period for any disclosure made by the applicant.

## Trademarks

Trademark registration (15 U.S.C. §§ 1051 *et seq.*) may be sought for a mark that indicates the source for goods and services relating to plants. While there are very unique forms of trademarks, a trademark generally consists of one or more words, a design or logo, or combination of both. Trademark can be the name applied

to the branding of a variety, series of varieties, or service offering, but cannot be the varietal name of the individual plant itself. The best trademark is one that is both distinctive and distinguishes the goods or services from those of others. While not required, an evaluation or search is recommended before adopting, using, or seeking to register a trademark to ensure that the selected mark is not confusingly similar to one already adopted by another for related goods and/or services. An application for a trademark registration should include the name, address and citizenship of the applicant, a representation of the mark, identification of the goods or services to be covered by the registration, and the proper government filing fee. An application can be filed either before or after the trademark has been used in connection with the goods or services of the owner. Before a Certificate of Registration can be issued in the United States, proper use of the mark on or in connection with the identified goods or services of the application must be demonstrated. Typically such evidence consists of plant tags, packaging, or the like. Once granted, a trademark registration can exist so long as the mark is used, the owner enforces its rights in the mark, and the registration is kept in force through filing with the USPTO declarations concerning that use.

### Conclusion

The United States offers various ways to protect your turf via plant patents, Plant Variety Protection Certificates, and traditional utility patents. The requirements and scope of protection vary for each regime. Additionally, while a trademark cannot be a variety name for a given plant, a trademark registration provides an enduring form of intellectual property protection for the plant community.

About the Author



Patricia A. Olosky is an Intellectual Property attorney and a Doctor of Pharmacy. Prior to joining The Webb Law Firm, she worked as a licensed pharmacist. Ms. Olosky has experience in drafting and prosecuting patent applications in the chemical and mechanical fields, as well as extensive experience in trademark selection and prosecution. She is active in the field of plant patents and other protections, including trademarks, for the horticultural industry.

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