



PANITCH TRAINING ACADEMY

Insights From Leaders In IP Law

Training Academy Session # 43

Increasing the Value of New Plant Varieties with Patents, Trademarks, and Licenses

Travis W. Bliss, Ph.D.
Stephany G. Small, Ph.D.

October 21, 2026

Legal Disclaimer

The material provided in this presentation is for informational purposes only and not for the purpose of providing legal advice. The opinions expressed herein are the opinions of the individual author and may not reflect the opinions of the firm or any individual attorney. The provision of this presentation and your receipt and/or use of it (1) is not provided in the course of and does not create or constitute an attorney-client relationship, (2) is not intended as a solicitation, (3) is not intended to convey or constitute legal advice, and (4) is not a substitute for obtaining legal advice from a qualified attorney. You should not act upon any such information without first seeking qualified professional counsel on your specific matter.

What are we going to discuss?

- IP basics: What is it? What does it get you?
- Types of varietal IP protection that are available for novel cultivars in the U.S.
- Trademarks as an additional layer of protection
- Impact of rights on freedom to operate
- Licensing novel varieties

What is the legal basis for plant IP?

- U.S. Congress put first patent law in place with the Patent Act of 1790
 - First U.S. patent issued July 31, 1790
- U.S. was the first country to specifically provide IP rights for novel plant varieties
 - U.S. Plant Patent Act of 1930 provided rights for asexually reproduced plants
- The rest of the world improved by offering IP for any plant
 - The International Union for the Protection Of New Varieties of Plants (UPOV) established in 1961

What is the legal basis for plant IP?

- U.S. enacted the Plant Variety Protection (PVP) Act in 1970, adding UPOV-style protection for sexually reproduced varieties
 - Bifurcated system: Plant Patents for asexual, PVPs for seed
- In 1980 the U.S. Supreme Court held that living organisms could be patented, which opened utility patents up for plants
 - Most of the world does not allow utility patents for plants created by traditional breeding
- 2018 Farm Bill revised the U.S. PVP Act to open up PVPs for asexually reproduced plants
- Result of all of this: Three different systems/options for protecting novel plant varieties in the U.S.

What do plant IP rights give you?

- Intellectual property is an **exclusionary** right
 - Gives the holder the right to exclude others from using their invention
 - Does not actually give the holder the right to do something
- Plant IP rights give the right to exclude others from:
 - Reproducing/duplicating your variety
 - Selling or importing the plant or its parts (e.g., fruit)
 - Using your variety to generate downstream varieties **in some cases**

Types of downstream varieties

- F1 seed for sale
- Essentially derived varieties (EDV)
 - Sports, mutants
 - Genetic editing(?)
- Novel varieties developed through breeding

What are we going to discuss?

- What is IP? Why does IP protection exist for plants? What does it get you?
- **Types of varietal IP protection that are available for novel cultivars in the U.S.**
- Trademarks as an additional layer of protection
- Impact of rights on freedom to operate
- Licensing novel varieties

Three Types of U.S. IP Protection for Varieties

- **Plant Patent**
 - Issued by U.S. Patent and Trademark Office (USPTO)
- **Utility Patent**
 - Issued by USPTO
- **Plant Variety Protection (PVP) Certificate**
 - Issued by U.S. Department of Agriculture (USDA)

Similarities of Three Types

- Variety Name
 - Use a boring, unpronounceable name ('SGS123')
 - Do NOT use a name that might be used for branding
- Time of filing application – Novelty Bar
 - Certain activities can start the clock for filing
 - Must file one year from activity in U.S.
- Disclosures require:
 - Description of new cultivar
 - Breeding history - identify parent(s)
- Must identify Inventor(s)/Breeder(s)

Plant Patents: Basics

- Only available for asexually reproduced varieties
- Requires a detailed botanical description
 - Must distinguish the variety from its parents and most similar varieties available
- No requirement for data from comparative field trials
- No biological deposit requirement

Plant Patents: Basics

- Usually takes 4-12 months to get allowed
- Very high allowance rate
- Lowest all-in cost, and all costs are paid by time plant patent issues
 - No maintenance fees or deposit fees

Plant Patents: Inventorship

- Conception is invention
- Multiple inventors for a single new variety is possible
 - Who decided the cross?
 - The person who performed the cross may or may not be an inventor
 - Who discovered the sport/mutant?
 - Who did the selection of the new variety?

Plant Patents: Novelty Bar

- Strict novelty bar
 - No Sale, offer for sale, or public availability of the variety anywhere in the world >1 year prior to filing the application
 - Just a disclosure of the variety should not destroy novelty
 - Will likely have to argue with the USPTO about the disclosure (improvement to USPTO searching capability and higher requirement of evidence)

Plant Patents: Novelty Bar

- Need to be careful with trials, trade shows, and public disclosures!
- Display at an after-hours show at Home Depot (>1 yr before filing) was novelty destroying for an ornamental plant
 - Need to look at specific circumstances of the disclosure
 - Public fruit tastings could be problematic(?)
- Be careful with public field days / taste tests
 - Do not use breeder code or variety name in public taste trials (A, B, etc.)
 - Have NDA or published rules for public viewing
- Trials should be experimental, not commercial
 - Sale of fruit from trial plants may be problematic(?)

Plant Patents: Scope of Protection

- Scope of protection is defined by the statute
- Gives you the right to exclude others from:
 - asexually reproducing the variety
 - making, using, or selling those asexually reproduced plants in the U.S.
 - including whole plants and parts
- BUT: Patent exhaustion limits ability to go after anyone who bought the plant legally and is using it to produce harvested material or for breeding

“Varietal” Utility Patents: Basics

- Available for asexually and seed reproduced varieties
- Requires a detailed botanical description, plus sufficient information to support claims relating to breeding, hybrids, mutants, genetic engineering, etc.
- Generally required to make a biological deposit
- Usually takes 12-36 months to get allowed
- Lower allowance rate; depends on claim scope
- Generally the highest cost of the three types of protection
 - Need to deposit biologic sample, which adds cost
 - Need to pay periodic maintenance fees after issuance

“Varietal” Utility Patents: Inventor(s)

- Like a plant patent, conception is invention and could have multiple inventors
- Slight difference because invention is not just the variety, but rather is defined by what is in the claims
 - Anyone who contributed something inventive to at least one claim is an inventor
 - If the claim recites genetic info, the person who did genetic work may be an inventor

“Varietal” Utility Patents: Novelty Bar

- Same strict novelty bar as for plant patents
 - No sales or public availability anywhere in the world >1 year prior to filing the application
 - Disclosure of genetic info may cause issues if genetic info is part of the claims

“Varietal” Utility Patents: Scope of Protection

- Scope of the claims dictates scope of protection
- Gives you the right to exclude others from making, using, or selling your claimed invention
- Should provide protection over your new variety, plus often get protection over:
 - breeding with your new variety
 - using the variety to produce F1 seed
 - essentially derived varieties (mutants, GM versions, etc.)
 - marker hunting in the variety

“Trait” Utility Patents

- “Varietal” Utility: Directed toward a single novel variety and varieties derived from that one variety
- “Trait” Utility: Captures any variety that possesses a particular novel trait
 - Example: You develop a strawberry variety that produces perfectly cube-shaped berries, so you seek a patent that covers any strawberry plant that produces cube-shaped berries



“Trait” Utility Patents

- Challenges for trait patents:
 - Used to be able to secure protection over a trait, so long as it was truly novel
 - Now it is difficult to get coverage that broad
 - Generally need some genetic information that explains how you achieved the desired trait
 - Likely limited to claims directed toward obtaining that trait in the same manner (e.g., by manipulating the same gene)
 - If the mutation naturally occurred, it is tough to protect
 - If inventors did mutagenesis, that is better

“Trait” Utility Patents

- Differences:
 - “Varietal” Utility does not stop someone from independently developing a plant with the same novel characteristic, so long as they do not use your variety to get there
 - “Trait” Utility stops someone from independently developing a new plant with that same trait
- Similarities:
 - These are both utility patents, it is just a difference in the claim scope you seek/obtain

PVPs: Basics

- Available for asexually and sexually reproduced varieties
 - Until 2018 only available for seed reproduced
- Application must include:
 - Detailed botanical description
 - Breeding history and selection process
 - Data from comparative field trials for DUS testing
 - No gov't oversight – just do the trial and report the data
 - Trials need not be completed in the U.S.
- Deposit: Must make a seed deposit; need not make a TC deposit (for the foreseeable future)

PVPs: Basics

- Usually takes 6-18 months to get allowed
- Very high allowance rate
- Cost is intermediate between plant patents and utility patents
 - All fees paid by issue date – no downstream maintenance fees

PVPs: Breeder

- Breeder can be one or more persons
 - Breeder can be person or entity
1. Person who bred, or discovered and developed, a variety
 2. Employer: Person who is the employer of (1) or who has commissioned the latter's work, where the laws of the relevant Contracting Party so provided
 3. Successor in the title of (1) or (2)

PVPs: Novelty Bar

- Novelty bar is dependent on where the sale occurred:
 - Sales within the U.S. >1 year before application date destroy novelty
 - Sales outside the U.S. >4/6 years before the application date destroy novelty
- Novelty bar has a little more wiggle room:
 - Some exception for sale of harvested material from trial plants

PVPs: Scope of Protection

- Scope of protection is defined by the statute
- Gives you the right to exclude others from making, using, or selling your particular cultivar in the U.S.
- Also protects:
 - using the variety to produce F1 seed for sale
 - essentially derived varieties
 - Third party cannot commercialize an EDV without permission of PVP holder

Statutory Limitations on PVPs

- **Research Exemption (a.k.a. Breeder's Exemption):**
 - “The use and reproduction of a protected variety for plant breeding or other bona fide research shall not constitute an infringement of the protection provided under this chapter.”
- **Crop Exemption (a.k.a. Farmer's Exemption):**
 - “it shall not infringe any right hereunder for a person to save seed produced by the person from seed obtained... by authority of the owner of the variety for seeding purposes and use such saved seed in the production of a crop for use on the farm of the person”

Comparison of the Three Types of Protection

	Plant Patent	PVP	“Varietal” Utility
Type of reproduction	Asexual only	Both seed and asexual	Both seed and asexual
Deposit req’t	No	Yes (seed, tuber) Not now (asexual)	Yes
Scope of protection	Only specific cultivar developed, including whole plants and all parts	Specific cultivar + hybrid seed produced for sale + essentially derived varieties (not parts)	Specific cultivar + hybrids, plant parts, mutants, breeding, marker identification, etc.
Limits on protection	Exhaustion of all rights except reproduction for any plants that are sold	Research / Breeder’s Exemption specifically allows breeding Crop/Farmer’s Exemption does <u>not</u> apply to asexual reproduction	Exhaustion of plant rights for plants that are sold, maybe exhaustion of method claims, no exhaustion of downstream plants
Time bar for filing	1 year from first sale or public availability anywhere in world	1 yr from U.S. sale; 4/6 yrs from sale elsewhere	1 year from first sale or public availability anywhere in world
Duration	20 years from filing	20/25 years from <u>issuance</u>	20 years from filing
Approx. cost	\$	\$\$	\$\$\$ (includes downstream maintenance fees and deposit costs)

Some issues that can arise with patents

- Wrong inventors are named
 - Improper inventorship can be invalidating to a patent
- Inadvertent triggering of the novelty bar during development / testing
 - Law is somewhat unsettled / in flux
 - Trialing without appropriate guard rails (testing agreements, confidentiality provisions, no sale/distribution of any material)
 - Commercial testing may not qualify as “experimental use”
 - Field days where public gets unrestricted access to unprotected varieties

What are we going to discuss?

- What is IP? Why does IP protection exist for plants?
What does it get you?
- Types of varietal IP protection that are available for novel cultivars in the U.S.
- **Trademarks as an additional layer of protection**
- Impact of rights on freedom to operate
- Licensing novel varieties

Trademarks

- Trademark protection differs in 2 key respects from variety protection:
 - Lasts indefinitely
 - Use it or lose it
- Generally useful for consumer-facing products
- Can be used for novel plant varieties
 - Cannot get a trademark on an actual variety name
 - Use an alphanumeric code for your variety name
- Can be used for downstream products of a particular plant variety

Build Your Brand Through Your Licensees

- Licenses can require the licensee to sell the plants or harvested material under particular branding
 - If you own the underlying brand, then your licensees are helping to build your brand name!
 - When variety rights expire, the brand can be so well known that licensees will keep paying license fees to sell under your brand

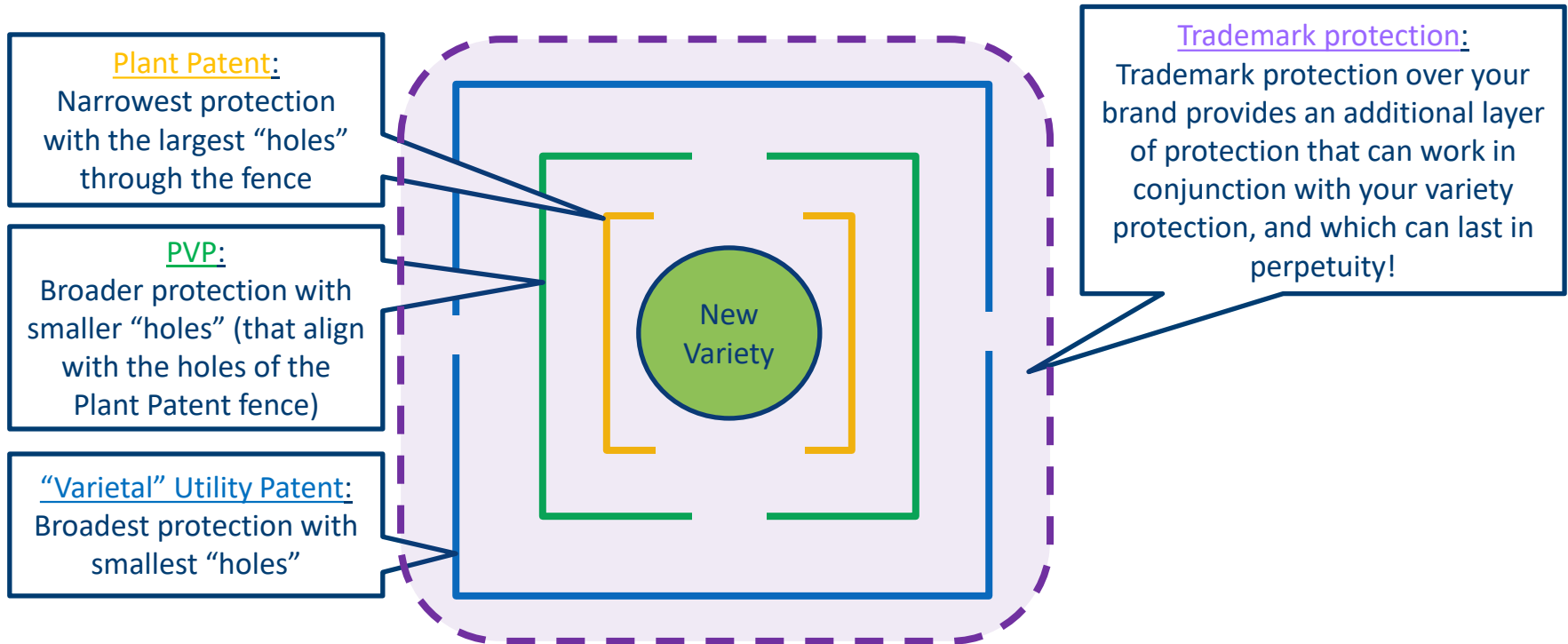
Build Your Brand Through Your Licensees

- Requiring patent/TM licensees to meet quality standards is OK
- For TM licenses you need to include quality standards or your TM may be lost
- Quality standards can include plant size, pot size, pot type, plant health, pest free, etc.
- Can prohibit the sale of products that do not meet quality standards, or require that they be sold under a name other than a brand name

Combine Multiple Protections

- Types of IP protection are not mutually exclusive—you can get more than one type of protection
- Use PVPs and/or Utility Patents to protect the new variety
 - PVP protection can provide extended coverage, especially for plants first sold outside the U.S.
 - “Varietal” Utility Patent protection can provide patent infringement liability for breeding and can cover downstream varieties
- Use trademarks to protect your variety/brand after expiration of variety rights

Combine Multiple Protections



What are we going to discuss?

- What is IP? Why does IP protection exist for plants?
What does it get you?
- Types of varietal IP protection that are available for novel cultivars in the U.S.
- Trademarks as an additional layer of protection
- **Impact of rights on freedom to operate**
- Licensing novel varieties

IP Rights and FTO

- Must consider how IP rights of others impact your “Freedom to Operate” (FTO)
- If a third party holds a PVP:
 - you may not use their protected variety to generate F1 seed for sale
 - if you develop an EDV, you need permission/agreement to commercialize
- If a third party holds a utility patent:
 - May not be able to generate an EDV or breed with the variety at all
 - U.S. utility patent does not control acts outside U.S., but may cover materials that are imported into the U.S.

What are we going to discuss?

- What is IP? Why does IP protection exist for plants?
What does it get you?
- Types of varietal IP protection that are available for novel cultivars in the U.S.
- Trademarks as an additional layer of protection
- Impact of rights on freedom to operate
- **Licensing novel varieties**

Licensing Plant IP Rights

- Ag/hort licensing schemes can be quite complex due to the inclusion of multiple players, multiple types of IP, and numerous distinct concerns due to ability to readily reproduce the patented invention (*i.e.*, the plant variety)
- Need to think through the entire license scheme on the front end to make sure the proper IP rights are in place
 - What are your licensees doing for you? Producing seed? Producing harvested material for consumers?
 - What activities are you trying to prohibit?
 - How will you be compensated by licensees?

License Strategies

- Combine multiple types of protection to strengthen your IP position
- Control through license what you do not get through the IP rights themselves
 - Breeding
 - Ownership of downstream varieties / EDV
 - Sale of harvested material
- Use licenses to mitigate the impact of exhaustion
 - Include appropriate remedies in your licenses to ensure you can enforce the license limitations
- Require sale under your trademark

Controlling Downstream Varieties Through License

- All of the available IP protections have limitations
 - Plant Patents do not stop breeding or creation of EDVs
 - PVPs do not stop breeding
 - Utility Patents do not require the patent owner to also own any downstream varieties
- You can still stop licensees from doing these things through contract

Controlling Downstream Varieties Through License

- Include license terms that stop licensees from using your variety to develop new varieties
 - Can be by any means: traditional breeding, mutation breeding, genetic engineering, etc.
- Include license terms that say the variety owner also owns any downstream varieties that are developed
 - Should say the licensee does assign and agrees to assign any varieties to you

Controlling Harvested Material

- A purchaser of a protected plant is free to use that plant to produce, harvest, and sell plant material, including harvested fruit/vegetables
- Can include license provisions that restrict these activities
 - Only allow sale through approved marketing company
 - Require payment of a license fee for sales of harvested material

Bottom Line...

- IP protection is available, and it is effective!
- Defense: Make sure to consider FTO issues when developing a new variety
- Offense: Develop a clear strategy and plan up front!
 - Secure appropriate protections
 - Develop licenses that plug the holes in your IP fence
 - Ensure that the licenses include the necessary provisions to be effective and maximize value

Speakers



Stephany G. Small, Ph.D.
(302) 394 - 6010
ssmall@panitchlaw.com



Travis W. Bliss, Ph.D.
(302) 394 - 6002
tbliss@panitchlaw.com

PANITCH
Intellectual Property Law
SCHWARZE



PANITCH TRAINING ACADEMY

Insights From Leaders In IP Law

Thank you for attending!

For information on all sessions in this series please visit:

<https://www.panitchlaw.com/panitch-training-academy-sessions/>