

Patenting Life

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What is a Patent?

- A grant made by a government that confers upon the creator of an invention the sole right to make, use, and sell that invention for a set period of time.

Criteria for a Patent:

- Useful in a practical sense
- Has to be novel, not known or used before the filing.
- Not obvious, can't be an improvement easily made by someone in the relevant area.
- Must be described in sufficient detail to enable one skilled in the field to use it for the stated purpose.

Exceptions:

- Raw products of nature are not patentable.
- DNA products usually become patentable when they have been isolated, purified, or modified to produce a unique form not found in nature.

Why is it important?

- Patenting provides a strategy for protecting inventions without secrecy.
- A patent grants the right to exclude others from making, using, and selling the invention for a limited term.
- If they cannot patent, it is claimed, then no one will invest the large sums of capital needed for genetic research, or it will all simply be kept secret.

What is Patenting Life?

- Putting a patent on a gene or an organism.

Criteria for Genetic Patenting:

- Identify novel genetic sequences
- Specify the sequence's product
- Specify how the product functions in nature --ie, its use
- Enable one skilled in the field to use the sequence for its stated purpose

Regulations:

- Diamond v. Chakrabarty (1980)
- Bayh-Dole Act
- TRIPS and the World Trade Organization

Real Life Patent Cases:

- Turmeric case
- Basmati case
- Seeds in Dissension

Arguments FOR gene patenting:

- Researchers are rewarded for their discoveries and can use monies gained from patenting to further their research
- The investment of resources is encouraged by providing a monopoly to the inventor and prohibiting competitors from making, using, or selling the invention without a license.
- Wasteful duplication of effort is prevented.
- Research is forced into new, unexplored areas.
- Secrecy is reduced and all researchers are ensured access to the new invention.

Arguments **AGAINST** gene patenting:

- Inappropriate reward given to the easiest step in the process.
- Patents could impede the development of diagnostics and therapeutics by third parties
- Patent stacking may discourage product development
- Because patent applications remain secret until granted, companies may work on developing a product only to find that new patents have been granted along the way, with unexpected licensing costs and possible infringement penalties.

Continued:

- Costs increase
- Patent holders are being allowed to patent a part of nature
- Monopolization
- Patent filings are replacing journal articles as places for public disclosure

Questions????