

Patenting Life: Summary, policy issues, and options for congressional action

U.S. Office of Technology Assessment

- Supreme Court: Laws of nature, physical phenomena, and abstract ideas can't be patented
- Patents are designed to encourage (\$\$) inventiveness
- Just because a patent is granted, doesn't mean the owner can make, use, or sell the product
 - o Federal, state, and local laws may intervene.
- What has been patented
 - o Processes
 - Beer fermentation (Louis Pasteur)
 - o Compositions containing living things
 - Sterility tests
 - Attenuated vaccines
- **Chakrabarty case (Supreme Court: 1980)**
 - o He'd developed a **bacteria** capable of breaking down crude oil
 - o Patent claim rejected since his patent was a "product of nature" and a living thing
 - o Decision: **Live, human-made micro-organism is patentable**
 - Stimulated the growth of biotech in the 1980s
- **1987 PTO (patent and trademark office) announcement**
 - o Non-naturally occurring nonhuman multicellular organisms are patentable
- Problems with transgenic animals \approx Integrity of the species may be disturbed
 - o But we've been doing that for centuries via selective breeding, etc.
- **Ethical Considerations**
 - o Consequences of patenting animals
 - Can be addressed by regulation
 - o Religious, spiritual, philosophical, metaphysical