

Exploration Paper  
Gene Patents  
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Gene Patenting was a controversial issue since the human genome was mapped. Companies wanted to patent specific genes that they “discovered” so they could have exclusive rights to products using the genes. They claim that patenting genes will encourage innovation like usual patents. Opponents of gene patents argue that genes are part of nature and not invented, so shouldn’t be patented. They believe that patents stifle innovation as they are far to broad.

One major gene patent case was over genes, BRCA1 and BRCA2. Myriad Genetics wanted to patent these genes, as they had discovered they were linked to breast cancer. The patent was challenged and eventually reached the supreme court. [patent] In 2013 the supreme court ruled that patent was invalid. The decision was based on the fact that the genes were naturally occurring and thus not invented by Myriad Genetics. [patent]

I believe this is the correct decision. If people could patent nature, it greatly restricts what other people can do. Imagine if someone found a set of genes that determines what smells good. They could try and argue that any product that produced scents infringed on their patent. This is clearly ludicrous. People need the ability to work on top of nature to innovate. Discovery should be shared, inventions need protecting only to allow the inventor to profit from their work. It also inspires creativity because other people need to invent other ways to perform the same task. On the other hand there is only one gene. Other people cannot invent a different gene, because that is all there is.

However the patent office also issued guidelines for acceptable patents that allow patenting whole genes and partial genes. In order to get the patent, the company must show “utility” and “substantial use”. [guidelines] In other words, they must have specific and important use for the gene. They argue that genes aren’t entirely natural, because genes can be artificially copied in a lab. This is garbage logic. The underlying gene is natural whether it was copied or not. No one can find an alternate way that is the same as the gene. There is no innovation for other people to find. So the gene is still natural, even if it is artificially copied.