

The Genomic Research and Accessibility Act (H.R. 977)

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Introduction

The United States Patent and Trademark Office (USPTO) has taken the position that gene sequences are patentable. Nearly 20% of human genes are already patented. Genes are products of nature and for the past 150 years, the law has been clear that products of nature are not patentable. Imagine if someone were allowed to patent air and charge us a fee every time we breathed, or allowed to patent the law of gravity and charge a royalty fee every time a person jumped up and down.

Gene patents inhibit biomedical research and interfere with patient care. They prevent physicians from using certain genetic sequences in the diagnosis and treatment of their patients. Gene patents inhibit research on genetic diseases. Gene patents prevent clinical laboratories from testing for genes, even by using non-patented tests, and from developing alternative tests that might be more accurate or less expensive. Companies that hold gene patents prevent genes from being used for pharmacogenomics, customized treatments based on an individual's genetic profile. Genes that have already been patented include those for obesity, asthma, cardiovascular disease, and breast cancer, among numerous others.

Patent System Foundation

The patent system is designed to provide incentives for innovation. Article I of the United States Constitution gives Congress the power “[to] promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.” Under the federal patent statutes, the patent applicant must show that his or her invention is novel, non-obvious, and useful. Patents should not be granted on products of nature or laws of nature (for example, a new plant is found in the wild, or $E=mc^2$). If this were not so, these products and laws would not be available for the use of everyone, and the purpose behind the patent system would be thwarted. Imagine, for example, if in our hypothetical the patent holder of air decided to stop research on pollution control. Or if the patent holder on the law of gravity decided to grant an exclusive license to Boeing. No other company could research aviation or space travel.

Yet patents on genes necessarily are products of nature; gene patents frequently contain nothing more than sequences of genomic DNA which are presenting human bodies.

The Genomic Research and Accessibility Act

The Genomic Research and Accessibility Act simply bans the practice of gene patenting. This would be prospective to protect the 80% of the genes that have not been patented.