

Patent 2

<http://wendy.seltzer.org/neu/IP/>

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Figure 1. An overview of the process of gene expression.

Figure 2. An overview of an EST's origin.

ESTs are generated by sequencing cDNA, which is a synthesized copy of the mRNA, regardless of its size. The cDNA is made up of parts of the genome that are being expressed. ESTs can be compared against known sequences in GenBank to identify genes. ESTs can also be used to identify new genes that are expressed in a particular tissue or cell type.

ESTs: Tools for Gene Mapping and Discovery

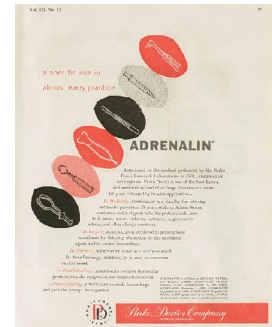
<http://www.ncbi.nlm.nih.gov/About/primer/est.html>

In-gene-ius?

- After months of slaving away in the lab over vials of drosophila (fruit flies), your friend believes she has identified some DNA fragments that might mark genes that might cause a cancer-like mutation in the flies. She thinks this may be the start of some promising anti-cancer research.
- Naturally, she asks you for intellectual property advice! What do you recommend?

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Parke-Davis v. H.K. Mulford Co.



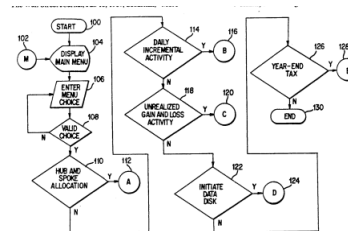
Poster from www.decodog.com

Gene Patents?

- How is a gene sequence, a segment of DNA isolated from the human genome, patentable?
- (1) an excised gene is eligible for a patent as a composition of matter or as an article of manufacture because that DNA molecule does not occur in that isolated form in nature, or (2) synthetic DNA preparations are eligible for patents because their purified state is different from the naturally occurring compound. Patenting compositions or compounds isolated from nature follows well established principles, and is not a new practice. For example, Louis Pasteur received U.S. Patent 141,072 in 1873, claiming "[y]east, free from organic germs of disease, as an article of manufacture." Another example is an early patent for adrenaline. In a decision finding the patent valid, the court explained that compounds isolated from nature are patentable: "even if it were merely an extracted product without change, there is no rule that such products are not patentable. Takamine was the first to make it [adrenaline] available for any use by removing it from the other gland-tissue in which it was found, and, while it is of course possible logically to call this a purification of the principle, it became for every practical purpose a new thing commercially and therapeutically. That was a good ground for a patent."

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State Street Bank v. Signature Financial Servs.



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Comiskey

- Lawyer seeks patent on:
- A method for mandatory arbitration resolution regarding one or more unilateral documents comprising the steps of:
 - enabling a person to enroll or register himself or herself and his or her one or more unilateral documents in a mandatory arbitration system;
 - providing arbitration language for insertion in the unilateral document wherein the arbitration language provides that any challenge to the unilateral document is to be presented to the mandatory arbitration system for binding arbitration;
 - enabling a complainant to submit a request for arbitration resolution;
 - conducting arbitration resolution;
 - providing support to the arbitration; and
 - determining an award or a decision that is final and binding.

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In Re Comiskey

Comiskey's patent application No. 09/461,442 claims a method and system for mandatory arbitration involving legal documents, such as wills or contracts. According to the application, the claimed "program" requires resolution by binding arbitration of any challenge or complaint concerning any unilateral document... [a] contractual document."

Independent claim 1 recites a "method for mandatory arbitration resolution regarding one or more unilateral documents" involving the following steps: First, the unilateral document and its author are enrolled or registered. Second, arbitration language is inserted in the unilateral document requiring that any challenge to the document be presented to the pre-chosen arbitration program for binding arbitration. Third, the method "enables" a complainant [sic] to submit a request for arbitration resolution." Fourth, the method conducts arbitration resolution. Fifth, the method provides "support to the arbitration." Finally, the method determines "an award or decision that is final and binding." Independent claim 32 is practically identical to claim

<http://www.ca9.uscourts.gov/opinions/06-1286.pdf>

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Not patentable

- Manifestations or products of nature
 - Laws of nature
 - Physical phenomena
 - Newly discovered materials
 - Plants found in the wild
- Abstract Ideas
- Printed Matter
- Inventions useful solely in atomic weapons

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Patentable?

- $E=mc^2$
- A storm forecast
- A formula for predicting storms
- A house mouse
- A dormouse, newly discovered to have medically useful properties
- A "Harvard" transgenic mouse
- Metabolic products of a drug in the mouse's stomach

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Utility

- What do we mean by "utility"?
- What does an inventor have to do to prove it?

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Utility

- What do we mean by "utility"?
- What does an inventor have to do to prove it?
- Utility must be:
 - specific
 - substantial
 - credible

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Utility

- **35 U.S.C. § 101:**

Whoever invents or discovers any new and **useful** process, machine, manufacture, or composition of matter, or any new and **useful** improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

- **§ 112. Specification:**

The specification shall contain a written description of the invention, **and of the manner and process of making and using it ...**

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Brenner v. Manson

- “A patent is not a hunting license. It is not a reward for the search, but compensation for its successful conclusion.”
- Has the patent applicant given the public its quid pro quo: useful benefit in exchange for monopoly?

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Figure 2.2a: Overview of an EST's use for study. ESTs are generated by sequencing cDNA, which is synthesized from the poly(A) tails of mRNA. The resulting cDNA is a collection of fragments of the genes that are being expressed, and ESTs are clones generated from the 5' and 3' ends of these genes. ESTs are used to identify genes that are expressed in particular parts of the genome.

ESTs: Tools for Gene Mapping and Discovery

<http://www.ncbi.nlm.nih.gov/About/primer/est.html>

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Patent requirements

- Patentable subject matter
- Utility
- Enablement

§ 112 Enablement

- The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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Incandescent Lamp

Patent

- Written description?
 - Best Mode?
 - Enablement?
1. carbonized fibrous or textile material
 2. that plus a bulb
 3. carbonized paper



Extra patent claims (not shown)

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What is it? 5,631,946

- 1. A system for transmitting originated information from one of a plurality of originating processors contained in an electronic mail system to at least one RF receiver with the originated information originating from one of the plurality of originating processors and being transmitted by an RF information transmission network to the at least one RF receiver and for transmitting other originated information originating from one of the originating processors with the electronic mail system without using the RF information transmission network to at least one of a plurality of destination processors comprising:

at least one interface, one of the at least one interface connecting the electronic mail system containing the plurality of originating processors to the RF information transmission network; and wherein

the originated information is transmitted in association with an address of the one interface from the one of the plurality of originating processors to the one interface with the electronic mail system responding to the address of the one interface to direct the originated information from the one of the plurality of originating processors to the one interface; and

the originated information is transmitted from the one of the at least one interface to the RF information transmission network with an

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A process version of same – NTP's claim to the BlackBerry

- 5. A method for transmitting originated information from one of a plurality of originating processors contained in an electronic mail system to at least one RF receiver with the originated information originating from one of the plurality of originating processors and being transmitted by an RF information transmission network to the at least one RF receiver and for transmitting other originated information originating from one of the originating processors with the electronic mail system without using the RF information transmission network to at least one of a plurality of destination processors comprising:

connecting the electronic mail system containing the plurality of originating processors to the RF information transmission network with one of at least one interface;

transmitting the originated information in association with an address of the one interface from one of the plurality of originating processors to the one interface with the electronic mail system responding to the address of the one interface to direct the originated information from the one of the plurality of originating processors to the one interface; and

transmitting the originated information from the one of the at least one interface to the RF information transmission network with an

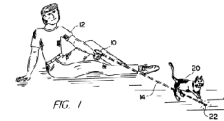
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Method of exercising a cat

- 1. A method of inducing aerobic exercise in an unrestrained cat comprising the steps of:

(a) directing an intense coherent beam of invisible light produced by a hand-held laser apparatus to produce a bright highly-focused pattern of light at the intersection of the beam and an opaque surface, said pattern being of visual interest to a cat; and

(b) selectively redirecting said beam out of the cat's immediate reach to induce said cat to run and chase said beam and pattern of light around an exercise area.



5,960,411

- 9. A server system for generating an order comprising:
 - a shopping cart ordering component; and
 - a single-action ordering component including:
 - a data storage medium storing information for a plurality of users;
 - a receiving component for receiving requests to order an item, a request including an indication of one of the plurality of users, the request being sent in response to only a single action being performed; and
 - an order placement component that retrieves from the data storage medium information for the indicated user and that uses the retrieved information to place an order for the indicated user for the item; and
 - an order fulfillment component that completes a purchase of the item in accordance with the order placed by the single-action ordering component.

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Amazon One-click: 5,960,411

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 - an order placement component that retrieves from the data storage medium information for the indicated user and that uses the retrieved information to place an order for the indicated user for the item; and
 - an order fulfillment component that completes a purchase of the item in accordance with the order placed by the single-action ordering component.

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