

PRESENTATION TO PENN

The Patent Process and Inventorship

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THE PATENTING PROCESS

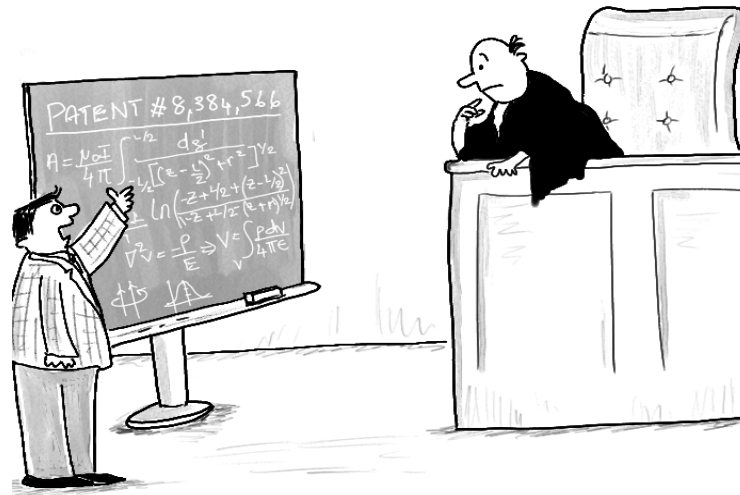


The Process

- **Disclose to your IP manager**
- **Work with patent attorney to develop and file patent application**
- **Examined by patent examiner**
- **Back and forth argument with possible amendments to the claims**
- **Notice of Allowance/Notice of Intent to Grant**
- **Issuance/Grant of patent**

PATENT APPLICATIONS

The Disclosure – all of the text, figures, tables, etc. that disclose the invention and the manner of making and using it



The Claims – a precise recitation of the invention, in numbered paragraphs at the end of the application

CLAIMS

1. An antibody-drug conjugate comprising an antibody having specificity for at least one type of tumor, a drug, and a linker coupling the drug to the antibody, wherein the linker is cleavable in the presence of a tumor.
2. The antibody-drug conjugate of claim 1, wherein the tumor is a pancreatic tumor.
3. The antibody of claim 2, wherein the drug is XYZ.

CLAIMS

1. A method of treating autoimmune disease comprising administering to a patient a composition comprising an analog of X, thereby treating the autoimmune disease.
2. The method of claim 1, wherein the analog of X is X-1, X-2 or X-3.
3. The method of claim 2, wherein the autoimmune disease is A, B or C.

PATENTABILITY

The Claims are assessed by an Examiner to see if they satisfy the following criteria:

- **Utility and Non-natural [35 U.S.C. § 101]**
- **Novel [35 U.S.C. § 102]**
- **Non-obvious [35 U.S.C. § 103]**
- **Claims are enabled by the specification as-filed [35 U.S.C. § 112]**
- **Claims satisfy the written description requirement [35 U.S.C. § 112]**

CRITERIA FOR PATENTABILITY

Utility: There must be a demonstrated utility, or an assertion of utility believable by one of skill in the art

Novelty: What is disclosed must be different from what is already known

Non-obviousness:

- Others have tried and failed
- Unexpected results, etc.



CRITERIA FOR PATENTABILITY

Enablement: Must teach others how to make and use the invention

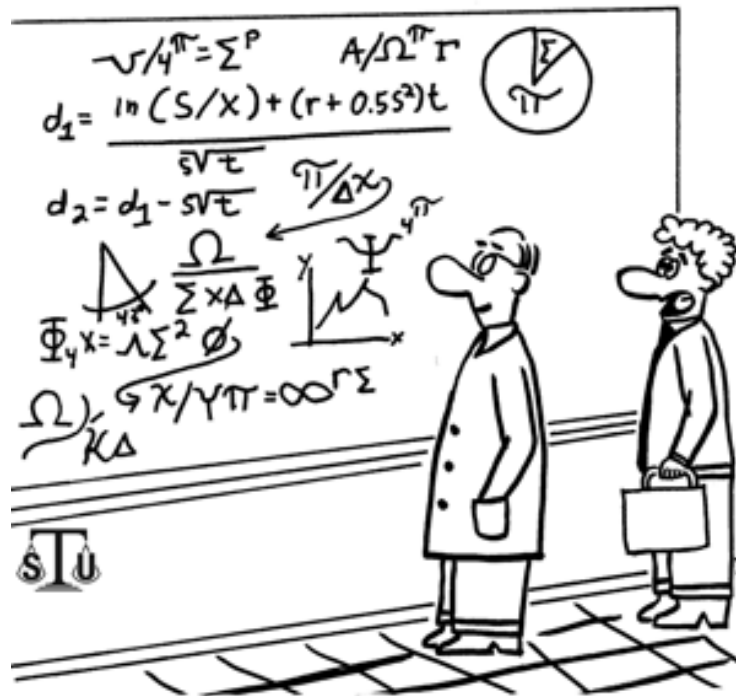
Written Description: Must describe the invention

Best Mode: Must disclose the best way of making and using the invention

CRITERIA FOR PATENTABILITY

Each of the above is examined by a Patent Office Examiner with respect to what is claimed

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To patent it, I'd have to understand it.
You may need a different lawyer.

THE DISCLOSURE DILEMMA

“PUBLICATION”



“Publications” include the following:

- A scientific article
- A thesis which is cataloged and available in a library
- An abstract which describes data in a poster or talk
- The abstract of a Government Agency Grant which is available to the public after the grant issues
- A public talk or poster which is open to people outside your own institution at which notes can be taken
- Funding/partnering pitch – what does the Business Plan disclose, was it presented under CDA?

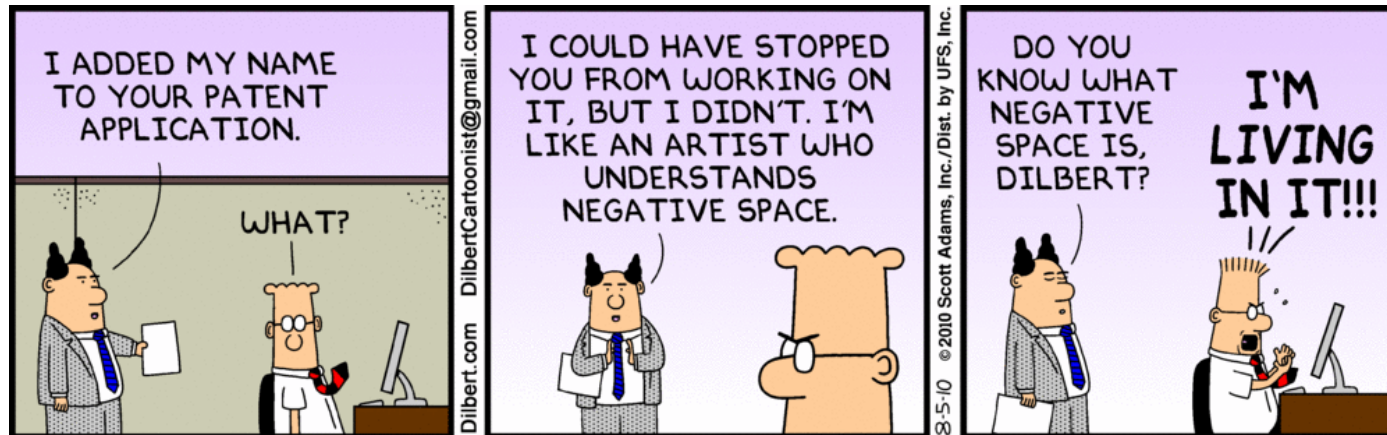
INVENTORSHIP

OWNERSHIP



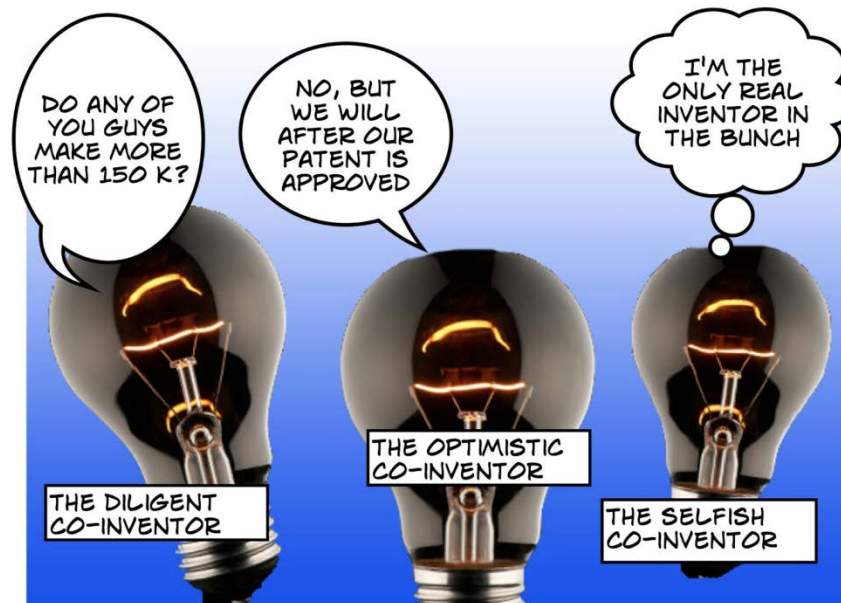
Inventorship

- A Patent Application must name the correct inventors
- A legal determination; NOT a moral decision



Ownership

- Ownership resides solely with the named inventor(s), unless there is an agreement that assigns the invention to another
- Each co-inventor owns an undivided interest in the entire patent, irrespective of their level of contribution
- A joint inventor who contributed to the invention of only one claim has an undivided interest in the whole patent



Conception

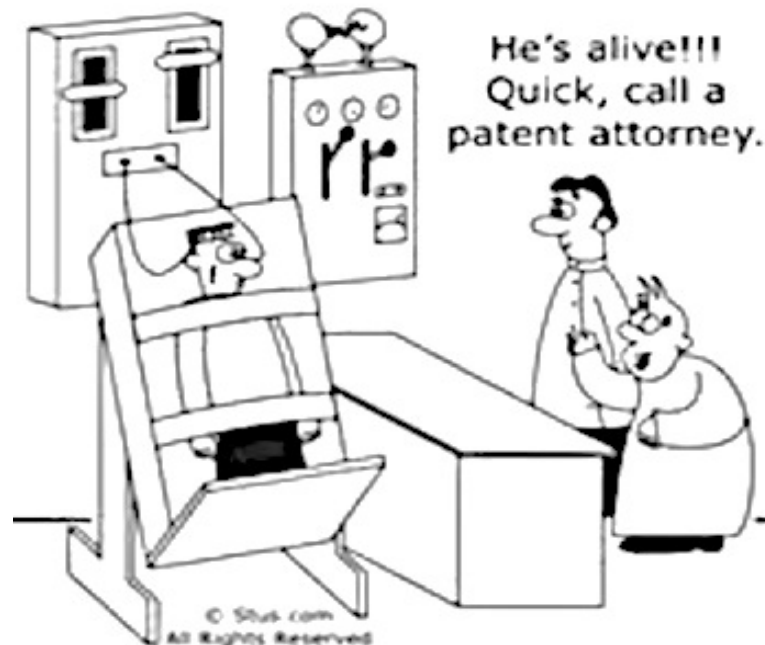
A definite and permanent idea of a complete and operative invention, including every feature of the subject matter sought to be patented

OOOOH! I AM SOOO
CREATIVE!



Reduction to Practice

- Reduction to practice
 - Actual - doing the experiment, making and testing
 - Constructive - file a patent application with an enabling disclosure



Joint Invention

Joint Inventors:

- Need not have physically worked together or at the same time
- Need not make an equal contribution
- Need not make a contribution to the subject matter of every claim
- Must have a collaboration

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