Virtual Learning

Aerospace Engineering

Using an Engineering Notebook

May 19, 2020

Aerospace Engineering
Lesson: May 19, 2020

Objective/Learning Target:

Students will be able to
properly use an engineering notebook.

Bell Work:

Why do you think an engineering notebook is important to an engineer?

Let’s Get Started:

Watch Videos:

- Engineering Notebook Basics
- Keeping an Engineering Journal

Using a Notebook to record ideas, inventions, experimentation records, observations and all work details is a vital part of any laboratory process. How you keep your Notebook can have a positive impact on the patent outcome of a pending discovery or invention.

This presentation will give you overall recommendations to help you keep more efficient and accurate Notebook entries. Remember, however, that these are simply a suggested set of guidelines. Only your attorney can supply the exact guidelines she would like you to follow to satisfy specific legal requirements. That is why we recommend that you consult your legal counsel.

Simple Rules to Follow

1. Always record entries legibly, neatly and in permanent ink.
2. Immediately enter into your notebook and date all original concepts, data and observations, using separate headings to differentiate each.
3. Record all concepts, results, references and other information in a systematic and orderly manner. (Language, charts and numbering systems should be maintained consistently throughout.)
4. It is acceptable to make your entries brief. Always, however, include enough details for someone else to successfully duplicate the work you have recorded.
5. Label all figures and calculations.
6. Never, under any circumstances, remove pages from your notebook.

Recording Data

Your Notebook is a vital record of your work whether it is for patent purposes, legal records or documenting drug research under FDA guidelines. The Notebook can help you prove:

1. Exact details and dates of conception
2. A chronological record of your work
3. Details and dates of reduction to practice
4. Diligence in reducing your invention to practice
5. Details regarding the structure and operation of your invention
6. Experimentation observations and results
7. Other work details

Formatting

1. Start entries at the top of the first page, and always make successive, dated entries, working your way to the bottom of the last page.
2. After completing a page, sign and date it clearly before continuing to the next page.
3. Never let anyone other than yourself write in your Notebook. (see exceptions below…)
4. Never leave blank spaces, and never erase or remove material you have added. Simply draw lines through any blank spaces at the same time you are making your entries.
5. Do not erase errors. Just draw a single line through any erroneous entry, and then add your initials.
6. You can supplement your entries with supporting material (e.g., test-results, printouts …) but you must permanently affix the material onto a page in its proper chronological location.

Working Towards a Patent

A primary purpose of a Notebook is the support of documenting work that may be patentable. Support patent activities, providing clear, concise, chronological entries with specific dates. To rely on these dates, you must have at least one non-inventor corroborate that the events actually happened and that he or she understood your invention by signing and dating the "Disclosed to and Understood by" signature blocks.

Documentation for a Patent

Your Notebook should help you document and prove:

1. Conception Date--The date that you knew your invention would solve the problem.
2. Date of reduction to practice--When you made a working embodiment of your Invention.
3. Diligence in reducing your invention to practice--Diligence refers to your intent and conscious effort to make a working embodiment. These are dates and facts that show what activities you have conducted to reduce the invention to practice, and when such activities were conducted. Since you may still be diligent despite periods of not working on reducing your invention to practice, always remember to provide reasonable excuses for these periods of inactivity by supplying facts relating to why there was no activity during the period in question. (e.g., unavailability of test conditions or equipment).

Documentation for a Patent

How to make and use your invention--provide documentation details sufficient to teach a colleague how to make and use your invention.

The best mode of practicing your invention--document the best way to use your invention.

Documentation Examples