



Kean University Notebook Guideline

On March 16, 2013 the U.S. switched from a “first to invent” to a “first inventor to file” system, bringing the US in line with other patent jurisdictions around the world. With this change, if two people separately apply for patents on the same invention, the patent will go to the inventor who filed first (assuming that neither inventor published prior to filing). Regardless of the change, OTL still encourages all researchers to maintain good laboratory notebooks to document conception and reduction to practice of inventions.

1. A laboratory notebook is important because it establishes a permanent record which can be referred to in the future to prove what was done during a project and particularly what inventions were made and when. When improperly kept, it may fail to prove what was conceived or done, and it may fail to indicate important dates.
2. Assuming that an invention is made during the course of a research project, the date of "conception" and "reduction to practice" may become important. Generally, a sketch and a brief written description are sufficient to establish conception. Reduction to practice can be established only by the actual construction and successful testing of a device incorporating the invention.
3. During prosecution of a patent application before the Patent Office, or even at times after issuance of a patent, another applicant for a patent may initiate a contest referred to as an "interference," to determine who was the first inventor. Each party has an opportunity to take depositions and to submit documentary proof to show their dates of conception and reduction to practice. The patent for the invention is then awarded in accordance with the facts proven by this evidence.
4. Even if the subject matter of a research project is not made on the basis of a patent application, it may become important to prove what was done. For example, someone else may obtain a patent on subject matter reduced to practice during the course of the work. In patent infringement litigation which may follow, the earlier laboratory work may establish a good defense. In another situation, it may be desirable to prove whether or not an invention occurred in the course of a specific research project.
5. From a legal standpoint, a laboratory entry should be competent to prove certain facts, such as the conception of an idea, the testing of a model, and the results of the test. It is possible for a laboratory entry to be so vague and lacking in clarity that it is not competent to prove such matters. For example, the entry may be so fragmentary that it is meaningless by itself, and can only be made intelligible when it is interpreted by the author. Such an entry is very little better than ordinary recollection without the aid of a document. Also, entries can be kept in such a manner that it is difficult to determine when the entry was made. Also, it may be an entry known only to one party; that is, not witnessed or explained to anyone else who is available to serve the essential function of corroborating witness.

6. The ideal notebook is one having all of the entries in ink or other permanent medium, using the standard laboratory book having permanent pages. All of the entries are identified with respect to the particular project for which the work was done. The entries include all formulae or diagrams and sketches of circuits and equipment which were considered during the project, including the ones actually built and tested. Diagrams and sketches should be accompanied by explanatory memoranda sufficient to identify and explain the subject matter. Another investigator, by looking over these entries, should be able to determine the nature of the project, when it was started, what ideas were considered during the project, the compounds made and tested, the results of the tests, the dates with respect to all of the above and the final conclusions.
7. Even though a laboratory notebook may not be kept in ideal fashion, the entries may be valuable at some future time provided certain simple safeguards are observed. The following comments may be helpful to avoid more common mistakes:
 - a. All data should be identified with respect to the project to which it relates. If possible, this should be by a project or experimental number, otherwise by a brief descriptive heading.
 - b. Entries should be consecutively dated. At least one other investigator, not a co-worker or joint inventor, should regularly look over the entries and witness the same by applying his signature and date.
 - c. In general, fragmentary diagrams or sketches, or diagrams and sketches without any explanatory notes, should be avoided. Circuit diagrams, for instance, should be as comprehensive as possible, using blocks or similar notations to indicate conventional parts.
 - d. Taking one entry by itself, it should, insofar as possible, be intelligible to another investigator without specific explanation.
 - e. Loose pages or inserts carrying sketches or other information should be avoided. If a sketch or note is made on a loose piece of paper, and you wish to place it in your book without making another entry, it should be permanently affixed in the notebook.
 - f. Investigators are encouraged to maintain individual notebooks. However, when there are two or more investigators working on the same project, they should not try to split entries between two or more laboratory books. One book should be complete by itself. When two or more investigators are making entries in the same book, they should initial their own entries.
 - g. Notations should be made of the progress and completion of compounds, assemblies, or models which are being prepared for testing. These entries should make clear, as by reference to a previous sketch, as to how the compound or equipment is being made.
 - h. Successful testing of a compound or particular setup or piece of equipment is "reduction to practice" as pointed out above, and is an important date. Notations of such tests should be made, with the compound or equipment being identified, and with comments concerning the results of the test. Tabulated test data can be given if available. Avoid unnecessary derogatory remarks about tests, such as the notation "NG."
 - i. Erasures should be avoided. If an error has been made, it is better to cross it out and make a new entry.
 - j. While records in pencil are better than no records, it is best to have them in permanent medium, such as ink or indelible pencil.
 - k. Entries should never be changed or enlarged at a later date, unless the nature of the change is

clearly indicated and dated by itself. Here again, it is better to make a new entry, pointing out the change.

- l. Pencil diagrams or sketches should never be retraced in ink.
 - m. Photographs are useful in keeping a complete laboratory notebook. Particularly where a model has been made and successfully tested, it is desirable to take one or more photographs which will serve as a future identification. The photographs can be permanently pasted into the laboratory notebook, with date and identification, and the name of the photographer.
 - n. Laboratory books should never be mutilated, as by tearing or cutting out pages.
 - o. When a project is divided between two or more investigators or groups, at least one group should make occasional entries showing the relation of the groups to the project as a whole, and indicating how a compound or equipment being developed by the different groups is to be combined in a common system.
 - p. In interference proceedings, the Patent Office has ruled that an inventor is not competent to prove the making and reduction to practice of an invention by his own testimony. His testimony is competent, but it must be corroborated by another witness. The other witness must not be a joint inventor. Because of this possible future difficulty in proving the records, another investigator should look over the entries in the book as frequently as possible, and place his initials at the end of each entry, with the date. Obviously, this date should be as near as possible to the date of the entry.
8. In general, all of the above must be kept within reason. It should be possible to keep records in reasonably complete and clear form without becoming too time-consuming and burdensome.

Notebook Entries

1. Make in permanent medium.
2. Use consecutive pages.
3. Date entries.
4. Identify subject matter.
5. Include sketches, diagrams, etc.
6. Explain sketches, etc.
7. Photos, drawing, etc., should be identified and permanently attached.
8. Avoid erasures.
9. Don't change entries; make new entry.
10. Periodically have someone look over entries and witness same by applying signature and date.