GUIDELINES FOR PREPARING A PATENT MEMORANDUM

The following information is directed to chemical and process inventions, but is readily adaptable to machines or apparatus inventions.

I. Object of Work

A brief statement of the problem, and how this invention solved it.

II. Abstract of the Disclosure

A brief summary of the scientific and technological subject matter of the invention.

III. Cross-Reference to Related Cases

List of patent applications and patents, known to you, that describe or claim related subject matter.

IV. Literature

A complete discussion of the state of the art at the time this memo is prepared. This is a very important part of the Patent Memorandum.

This review should include all of the literature, including the patent literature known to you at the time of writing the Patent Memorandum. All references of any possible interest should be noted. If nothing seems particularly pertinent, cite the closest references found.

Each reference should be treated in detail, to set forth fully the disclosures made in the document. In reading the patent literature, the body of the patent, not the claims, is important. Differences from the prior art should be pointed out for each reference.

If the literature is so extensive that this section is unduly time-consuming to prepare, it is suggested that the closest references be selected, and discussed with Patent Counsel in order to limit the definition of the invention.

V. Description of the Invention

A. General Description

In general terms, what are believed to be the new and important aspects of the invention? Formulas, flow sheets, etc., should be given, but restricted to what has actually been found to be workable.

B. Detailed Description

Discuss in detail the nature of the technological advance over previously known products and processes. Where available, comparisons with prior practices should be included in the experimental section.

This section not only covers experimental details, but should include alternative procedures, in order to protect the invention as completely as possible. For each of the following, both preferred and operative ranges should be given:

1. Chemical Date

a. New Processes, or Methods of Making New Compounds

- (1) reactants
- (2) concentrations and amounts
- (3) temperatures
- (4) pressures
- (5) time
- (6) diluents
- (7) flow sheets and equipment
- (8) any other process variables

b. New Compositions and Compounds

- (1) single species or a class
- (2) possible substituents, chain length variations, homologs, analogs, etc.
- (3) presence or absence of diluents
- (4) ingredient proportions if a mixture
- (5) possible equivalents
- (6) degree of purity necessary for each constituent
- (7) analytical techniques for any but routine analyses

C. Specific Examples

These should be written in the same detail and form as for a technical paper. The notebook reference should be provided for each example. Examples should illustrate the ranges of preferred and operative conditions for all variables. Be sure to include the preferred embodiments, and the best method of carrying out the invention. If in doubt as to which experiments to select, a tabulation of available data may be submitted at this point, for selection of examples by Patent and Licensing Counsel.

VI. <u>Invention Record Information</u>

A. Personnel

List names of the contributing personnel, giving the full first name, the initial or full second name, and the surname, and citizenship and post office address (street, number, town, county, state), and a brief description of the contribution of each.