

## CONTENTS OF A PATENT APPLICATION FOR A COMPOSITION

### **I. BACKGROUND**

**A.** Describe the problem and why it's important to solve that problem.

**B.** Describe current solutions you are aware of and their shortcomings.

### **II. SUMMARY OF THE INVENTION**

**A.** Generally speaking (in summary), what is the invention and how does it work?

Describe your invention as if you were giving a 30 second sales pitch.

**B.** How does your invention solve the problem described in the Background section?

**C.** What are the goals/objectives of your invention?

**D.** What are the advantages your invention has over the current solutions?

### **III. BRIEF DESCRIPTION OF DRAWINGS**

**A.** Provide any drawings (CAD, SolidWorks, hand drawings, etc.) showing the features of your invention.

1. chemical formula
2. structural formula
3. pharmacophore responsible for action

**B.** Provide Flow Charts for:

1. Mechanism of action
2. Instructions for using
3. Process for making

#### **IV. DETAILED DESCRIPTION OF THE INVENTION**

**A.** Describe the condition to be treated.

**B.** List each component or composition of your invention, main ingredient and inactive ingredients.

1. What is the compound name?

2. What is the chemical formula?

**C.** For each component/composition/step listed above:

1. Describe the purpose/function/utility of that component.

2. Describe how each component, compound, or step listed relates to, interacts with, or cooperates with the other components, compounds, or steps.

3. Describe the characteristics, properties, steps, and other details that show how the purpose/function/utility is achieved.

a) List/Describe the targeted patient population, disease/condition, gene, receptor, protein, antigen, cell-type, etc.

b) Describe the mechanism of action.

4. Describe any advantages of the component or step over existing components or steps having the same or similar purpose/function/utility/characteristics/properties.

5. List substitutes that can achieve the desired purpose/function/utility or have similar characteristics/properties of the component.

a) Consider how your competitor would get around your invention.

b) From a hierarchical standpoint, what genus, family, order, class, etc. does the component or composition fall under.

- i) Identify any salts, enantiomers, derivatives, isomers, intermediates, metabolites, etc.

**D. Describe how to make the invention.**

1. What steps do you have to take?
2. Who or what does it?
3. How do you do it?
4. What do you do use?
5. What conditions are required when this step is done?
6. Where do you do it?
7. When does it have to be done?
8. Why do it?
9. How else can this step be done?

**E. Describe how to use the invention.**

1. Describe administration or application protocols.
2. Modes of administration or application.

**F. Describe data/results showing utility and efficacy.**

1. Describe the subject and the condition being treated.
2. Describe the composition to be administered.
3. Describe the administration protocol.
4. Describe the results
  - a) In particular, note any unusual, surprising, unexpected, or superior results, such as effectiveness, speed, minimal side effects, low dose, etc.