# CONTENTS OF A PATENT APPLICATION

# I. CROSS-REFERENCE TO RELATED APPLICATION

- **A.** Has any application been filed by any of the inventors related to the subject matter of this application?
  - 1. What is the Patent Application No.?
  - 2. When was that application filed?
  - **3.** What is the title of the application?

# II. TECHNICAL FIELD

A. In general, what is the field of technology for this invention?

## III. 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.
- **C.** Describe what solutions are still needed.

# IV. 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?

#### V. BRIEF DESCRIPTION OF DRAWINGS

**A.** Please provide any drawings (CAD, SolidWorks, hand drawings, etc.), photographs, or flow diagrams and flow charts showing the features of your invention.

## **B.** Helpful views include:

- 1. Flow charts of the overall concept
- 2. Detailed flow charts of routines and subroutines.
- 3. Schematic of the computer architecture

## VI. DETAILED DESCRIPTION OF THE INVENTION

- **A.** List each step of your invention.
  - 1. Process: Name the steps involved to accomplish your goal.
  - 2. If the Process involves a machines or devices, for each machine or device, name the parts.
  - **3.** Computer/Internet (Combination of Apparatus and Process)
    - a) Describe the overall computer architecture (the hardware), i.e. processor, memory, database/storage device, I/O devices, input devices, output devices, network adapters, etc.
    - b) Describe the overall process in a single flowchart.
- **B.** For each component/step listed above:
  - 1. Describe the purpose/function/utility of that component or step.

- **2.** Describe how each component, or step listed relates to, interacts with, or cooperates with the other components, or steps.
- **3.** Describe the characteristics, properties, steps, and other details that show how the purpose/function/utility is achieved.

#### a) Process

- i) Who or what does it?
- ii) How do you do it?
- iii) What do you do it with?
- iv) What conditions are required when this step is done?
- v) Where do you do it?
- vi) When does it have to be done?
- vii) Why do it?
- viii) How else can this step be done?

## b) Computer/Internet

- i) Show and describe a series of flow charts that detail the various routines and subroutines that connect together to create the overall process described above.
  - (a) Present or describe the algorithms required to perform desired function.
  - (b) In general, provide enough information that allows a programmer reading your specification to write the code to generate the desired outcome.

- (c) This description should be from the perspective of the computer or server.
- (d) Describe the logic the computer needs to follow.
  - (i) providing a program specification would be helpful
  - (ii) providing flow diagrams would be helpful
- ii) Describe the data structure.
  - (a) What is the data being collected?
  - (b) How is that data used or "transformed" and presented to the user?
- **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) Think about how your competitor would get around your invention.