

# Comments On The Patent Application Drafting Assignment

- I. General
- II. Strive For Clarity
- III. Summary
- IV. Background

## I. General

- A. Good job to everyone who incorporated the previous comments and revised their DD
- B. Still had some people writing “the invention does X” rather than “one embodiment of the invention does X” - Watch out! It may be binding.

## II. Strive For Clarity

- A. Subject, Verb, Predicate  
Say exactly, precisely what you mean  
Common English - “Oh, you kinda know what I mean” is not good enough  
We need to lock down the language to withstand attack.
- B. One sentence, one concept
- C. Don’t use pronoun-like shortcut words, especially after complex sentences  
The use may be unclear and may open the door to adverse interpretation.  
Example: [sentence reciting several devices]. Such devices ..  
OR “This device ...” (which one?)  
Instead: “The solar panel devices ...” OR “the solar panel”  
Even: “Such solar panel devices ...” would be ok as long as it is clear.  
Lock down the meaning so that adverse parties can’t tamper with it.
- D. Use “because” when you mean “because” - not “since” or “as”  
“Since” has a time element and “as” implies a comparison

- E. Unclear phrases:
  - the X “affords” - do you mean “provides”?
  - “the technology gave birth to”
  - “etc.” - why use it? What are you disclosing?
- F. Watch the slang - “power runs out” “keeps time”
- G. Watch the statements of criticality: necessary, need, must
- H. Again, bad words include: means, can/will/maybe, inherent
- I. Use “typically” not “usually”

### III. Summary

- A. Limit the summary to the independent claim. Don’t try to summarize everything in your DD in the Summary. Just hit the main points.
- B. Do provide the general structure of your invention rather than just reciting the advantages of the invention.

### IV. Background

- A. Most people probably found it more difficult to write the background than the DD because ICOA gives you a structure/outline and a starting point for your efforts. It’s much more difficult to get started when you have no structure, right? Feedback with regard to the experience?
- B. The Background can be taken as admitted prior art. Consequently, as we discussed in class, **DO NOT DISCLOSE YOUR INVENTION IN THE BACKGROUND**. What you view as your point of novelty should not be disclosed in the Background. Example:
  - OK - “A solar umbrella with a power system that provides increased electricity is desirable.” (I can’t claim that)
  - NO - “A solar umbrella with a plurality of flexible solar panels positioned on its canopy would be desirable.” (That’s my claim that I just arguably gave away!)

Note though that the first phrase poses the need/question and the second phrase is the answer.

- C. You have at least two prior art patents. Did you disclose them in your Background? The Background is a good place to explain the prior art and then differentiate your invention from the prior art. Also, the Examiner typically believes what you write in the background with regard to the PA and doubts your later responses to office actions. Disclosing the PA references can help you more clearly point out to the Examiner what is missing in the prior art.
- D. When we talk about the prior art, give the Examiner some “hard” difference to focus on. The fact that a feature is not there is a hard difference. Stating that the prior art is not “convenient” or “easy” or “of dubious value” or any other “value word” is not a hard difference that appeals to the Examiner or buys you distinction for your claims. Focus on elements that you can differentiate in your claims. It’s sort of like an *ad hominem* attack - we don’t want that, we want to focus on the facts and the claims.
- E. Don’t just point out something in the prior art and then move on. When you are pointing something out, you are doing so for a reason. STATE THE REASON. Why is the fact that you have highlighted important? What should the Examiner remember for later when he is looking at the claims with regard to what you just pointed out? Write out the conclusion that necessarily follows from the facts that you have just related. Don’t assume that the user will make the same decision with regard to the facts that you did. Be specific. Be clear.
- F. Remember that the Background is linked to your claims. Specifically, you are pointing out that the prior art does not teach what is in your claims. You are NOT just stating that a new umbrella would be nice. You are focusing on the absence in the prior art of a specific feature. Your invention as claimed is what remedies that absence.
- G. Many of the Backgrounds were not very focused and kind of wandered. It may help to outline the background before you start writing. It may also help to let someone else see it after you have written it and then get

comments from them, especially someone not familiar with the invention.

- H. As you are writing the background, think about what you are writing. How does it advance the ball? How does it help the Examiner understand your differences from the prior art? AKA How does it create a clear differentiation in the mind of the Examiner between my invention and the prior art?
- I. Some people seemed to think of the prior art more in terms of “the invention” than “the disclosure”. There is a difference between “the invention of Li” and “the patent of Li states”. I don’t know the extent of the disclosure of Li’s invention, but I do know the extent of the disclosure of Li’s patent. The Examiner also is only looking at the disclosure of Li’s patent. We want to limit the Li to what is actually in the disclosure. Therefore, we don’t talk about “the Li invention” or “another proposed umbrella” (it’s not a proposal, it’s a disclosure)
- J. When drafting patent applications, we use certain language not because we are hidebound traditionalists, but because the language that we are using is very precise. Thus, we talk about “the Li patent” not “the invention” or “a plurality”, for examples. Try to cultivate the habit of being very specific in your writing.

See the attached model Background, Summary and Abstract

### **FEEDBACK**

What would you do differently if you were starting over again?

What advice would you give yourself?

## BACKGROUND OF THE INVENTION

[0001] The present invention generally relates to an umbrella apparatus. More particularly, the present invention relates to a solar-powered beach umbrella apparatus which comprises a power control system that outputs power to external devices

[0002] A beach umbrella is typically erected in an upright fashion in order to provide its user with shade from sunlight or shelter from rain and wind. Beach umbrellas are typically set up at beach areas. However, beach umbrellas are often used in a variety of other settings such as campsites, domestic gardens, outdoor patios, and mobile vending units. Beach umbrellas have become a staple item in the market for outdoors equipment.

[0003] Generally, a conventional beach umbrella <sup>typically</sup> usually comprises an umbrella base, a main pole portion, a locking mechanism, and a canopy section. Usually, the canopy section sits atop the main pole portion and is comprised of some type of fabric. The canopy section is the portion of the beach umbrella <sup>that</sup> which provides the shade from sunlight and the shelter from rain. Additionally, beach umbrellas <sup>typically are constructed to</sup> usually have the ability to open and close to facilitate storage and transfer. <sup>the</sup> This opening and closing <sup>of the U</sup>

~~functionality~~ <sup>typically</sup> is initiated by the toggling the locking mechanism. Further, beach umbrellas <sup>typ</sup> usually have a stability mechanism located at the base of the umbrella. As the base of a beach umbrella is usually stuck into sand, dirt, or soft ground, a stability mechanism is <sup>desirable</sup> ~~necessary~~ to allow the umbrella to remain in an upright position.

[0004] In order to fully enjoy and facilitate their time spent outdoors under a beach umbrella, umbrella users often bring a wide variety of electrical devices with them to their outdoor location. These electrical devices include lights, radios, cellular phones,

laptop computers, portable televisions, and portable gaming devices. Individuals utilize these devices to both enhance their recreation experience and to stay in touch with their daily life.

[0005] Naturally, these devices require a source of power. However, as beach umbrellas are typically used outside and in remote settings, the existence of an electrical power source cannot be guaranteed. Thus, umbrella users are often left with a host of devices that need power, and no power source. <sup>yes!</sup> ~~A very good~~ <sup>One</sup> solution to this problem is to merge solar power technology with an umbrella apparatus. Then, a solar-powered umbrella can collect solar energy, convert it to electrical energy, and use the electrical energy to power various devices. *getting pretty close to our invention - watch out!*

[0006] The existing umbrellas that utilize a solar power system to provide electrical power to devices are ~~primitive~~ and severely limited. The existing umbrellas that utilize solar power are ~~only capable of providing power to a limited number of devices.~~ <sup>manufactured to only provide</sup> Further, ~~the existing umbrellas which utilize solar power are only capable of powering devices~~ <sup>most</sup> ~~that are physically attached to and part of the umbrella apparatus.~~ <sup>not</sup> ~~that are physically attached to and part of the umbrella apparatus.~~ <sup>manufactured to only provide</sup>

[0007] For example, one ~~such existing~~ <sup>PA</sup> solar powered umbrella is disclosed in Li, U.S. Pat. No. 6,923,194. The umbrella apparatus of Li contains a solar supply arrangement at the top of the umbrella pole. This solar supply arrangement converts solar energy into electrical energy. Mounted on and physically attached to the umbrella frame of the umbrella is a lighting system. The electric energy from the solar supply arrangement powers the lighting system.

[0008] The solar power system that is part of the Li umbrella is ~~only capable of providing~~ <sup>constructed to only provide</sup> power to this proprietary lighting system that is directly mounted on the umbrella and

located under the canopy. Thus, the Li umbrella is ~~essentially~~ an umbrella with a solar-powered lighting system attached to it. The only function other than shade and shelter that the Li umbrella provides ~~an individual with~~ is the ability to provide light to the region below the canopy <sup>using</sup> via the attached lighting structure.

*This Li system suffers from several drawbacks*  
[0009] ~~This is less than optimal and does not exploit the full potential of an umbrella~~

~~comprising a solar power system.~~ First, the Li umbrella does not provide adequate functionality to users that want to use electrical lighting systems in conjunction with the umbrella. Users of the Li umbrella must either bring their own lighting systems and risk the likely absence of a power source, or must rely on the limited lighting system built into the Li umbrella. This is unfortunate <sup>because</sup> as many individuals desire to use spotlights, reading lights, lantern-style lights, and other lights <sup>that</sup> which serve specialized lighting needs and require access to a power source. Second, with the Li umbrella, individuals are also not able to power any of the varied electrical devices they might have with them while outdoors or at the beach. <sup>that is</sup> Aside from lighting devices, individuals desire to use and provide power to devices such as radios, cellular phones, laptop computers, portable televisions, and portable gaming devices while using an umbrella. *good*

<sup>for example</sup>  
[0010] Another solar powered umbrella is disclosed in Kuelbs, U.S. Pat. App. Pub. No. 2006/0005869. The Kuelbs umbrella is a typical lawn or patio umbrella which has a solar collector located near the top of the umbrella pole portion. Similar to the Li, the solar collector in Kuelbs converts solar energy into electrical energy. Also similar to Li, the Kuelbs umbrella comprises a ~~proprietary~~ lighting system that is physically attached to the umbrella and used to provide light to the area under the umbrella canopy. The electrical energy produced by the solar collector in Kuelbs powers this ~~proprietary~~

*represents an advancement compared to ~~the~~ provides*

lighting system. The Kuelbs umbrella also ~~builds on~~ the Li umbrella and affords users ~~with~~

more functionality by providing ~~proprietary~~, modular, and interchangeable devices which can be selectively attached to the umbrella apparatus and electrically coupled to the solar power collector. However, <sup>the</sup> Kuelbs umbrella is only capable of proving power to these modular devices that are part of the umbrella. <sup>That is,</sup> Users are unable to bring their favorite electrical devices from home and have ~~them~~ <sup>the devices</sup> interface and draw power from the Kuelbs umbrella. *for example*

[0011] While providing more functionality than the Li umbrella, the Kuelbs umbrella still only provides users with a closed set of electrical devices that can possibly be powered by and used in conjunction with the solar powered umbrella. Thus the Kuelbs umbrella is less than optimal and does not exploit the full potential of an umbrella comprising a solar power system. While outdoors, or at the beach, and using a solar power umbrella, consumers ~~desire~~ <sup>desire</sup> to use and provide power to a wide variety of electrical devices and ~~to~~ not wish to be limited to a closed set of ~~proprietary~~ electrical devices. Unfortunately, the ~~existing~~ <sup>prior art</sup> umbrellas do not provide a system which allows individuals to, for example, ~~spend a day at the beach free of missed cell phone calls and free from a laptop that quickly runs out of power.~~ *Have access to additional power in order to ~~use~~ provide*

*Talk about manufacturer's limitations = manufacturer to provide a system*

*additionally*  
[0012] When individuals travel outdoors, or to the beach they very often choose to

enhance their experience by listening to music. ~~To a large degree, umbrella usage and music listening go hand in hand.~~ *slang*

[0013] ~~Currently, existing~~ <sup>PA</sup> umbrellas ~~don't exploit this strong correspondence between umbrella usage and music listening.~~ *do not provide ~~access~~ the ability to listen to music* For example, neither the Li umbrella nor the Kuelbs umbrella provides for the powering and utilization of a music device. Thus, to enjoy

*we do know that they're proprietary? would they affect us?*



music while outdoors while using an umbrella, individuals ~~are left with unattractive options. Currently when individuals travel outdoors or to the beach with an umbrella they~~ must also bring a separate device for playing music and place it near their location under the umbrella. This solution is less than optimal for a variety of reasons. First, individuals are often forgetful, especially when planning outdoor trips. Thus there is no guarantee an individual will consistently remember to bring a device for playing music. Second, devices for music consume electrical power ~~very quickly~~. Thus even if individuals bring a separate music device, <sup>Because</sup> as there is likely no power source in the outdoors or at the beach, the music device <sup>is typically</sup> will only be able to operate for a short duration of time and <sup>is</sup> ~~will~~ not <sup>be</sup> able to be recharged. Third, it is <sup>typically</sup> undesirable for users to have to put their music playing devices in the sand, in the dirt, or near the water. The music playing devices can easily be damaged or lost.

[0014] As mentioned, <sup>above</sup> umbrella users are often in possession of a number of electrical devices while they use an umbrella. Because of this, individuals are in need of a power supply. However, to fully benefit from and enjoy the concurrent usage of an umbrella and electrical devices, not just any power source will suffice. Umbrella users demand a power source that is capable of meeting the power needs of their many <sup>devices</sup> ~~gadgets~~. The existing umbrellas which utilize solar power do not do so in the most efficient manner. For example, in both the Li and Kuelbs umbrella, the solar collector comprises a relatively small spherical or disk shaped device that is attached to the top of the umbrella pole. This limits the amount of surface of the solar collector devices that is exposed to the sun. Thus, this setup severely limits the quantity of solar energy that <sup>may be</sup> ~~is~~ collected, and in turn, the quantity of electrical energy that is produced. As a result, individuals who

wish to power substantial electrical devices are likely to be frustrated by the low electrical energy output of the existing umbrellas. One way individuals can deal with the lower power outputs of existing solar power umbrellas is to bring their own portable power source wherever they take their umbrella. This portable power source might come in the form of a large, heavy-duty batter. This solution is also undesirable <sup>Because</sup> as traveling with such a portable power device is cumbersome. Additionally, when the solar collector is attached on the top of the umbrella pole, it provides for cumbersome storage and travel.

[0015] In order to provide individuals who use umbrellas with a ~~means~~ for powering the variety of devices that they bring with them in the outdoors or to the beach, it is highly desirable to have an umbrella apparatus which is capable of providing power to electrical ~~to most~~ electrical devices that have standard power inputs ~~and~~ outputs. It may also be highly desirable to have a solar power umbrella apparatus that is capable of providing power to devices that are external it. It may also be highly desirable to have an umbrella apparatus which is offers a ~~robust~~ <sup>provides</sup> recharging system that ~~affords~~ users numerous options for transferring power to the umbrella apparatus.

<sup>additionally</sup> [0016] In order to facilitate the desire of many umbrella users to listen to music, it is highly desirable to have an umbrella apparatus <sup>having</sup> which ~~seamlessly integrates~~ the ability to play music <sup>as well as having the ability to store the music to be played</sup> ~~into the umbrella apparatus~~. Additionally, in order to centralize the location of music that is to be played when using an umbrella, it is desirable to have an umbrella apparatus which provides a system for storing music.

<sup>provide increased power</sup> [0017] In order to ~~meet the steep power needs of individuals~~, it may be desirable to have a solar power umbrella which orients its solar energy collection device ~~in a way~~ that maximizes solar energy collection. In addition, it may be desirable to have a solar power

<sup>including an optionally oriented</sup>

*including an optically positioned*

umbrella apparatus which ~~optimally positions its~~ solar collecting device ~~in order to~~ *that*  
provide for easy travel, storage, and durability.

*Do these add anything?*

*Because*  
[0018] As beach umbrellas serve an important function, they have become a staple article of those who partake in beach-going and other outdoor activities. However, the umbrella art has remained stagnant and has yet to be fully exploited to meet the increased functionality demands made by users.

[0019] Further, as many consumers frequently travel to the beach and other outdoor venues, there has traditionally been a strong demand for beach umbrellas. As a result beach umbrellas have consistently enjoyed marketplace success. Given the relatively high degree of interest in beach umbrellas, it is likely that improved beach umbrellas with enhanced functionality will be well received in the marketplace.

[0020] Thus, a need has long been felt for a solar-powered beach umbrella apparatus which comprises a power control system that outputs power to external devices .

BRIEF SUMMARY OF THE INVENTION

[0021] An embodiment of the present invention provides a solar power beach umbrella apparatus. The solar power beach umbrella apparatus comprises a pole, a canopy attached to the pole, a solar collecting device attached to the canopy, and a power control system. The solar collecting device receives solar energy and converts the solar energy into electrical energy. The solar collecting device transfers the electrical energy to the power control system to which it is electrically coupled. The power control system transfers electrical energy to the various electrical components <sup>OK</sup> ~~which~~ <sup>that</sup> comprise the umbrella apparatus. Additionally, the power control system provides power to ~~which are~~ external, independently operative devices that are electrically coupled to the umbrella apparatus. When a external, independently operative device is electrically coupled to the umbrella apparatus, the power control system accordingly powers the device by transferring electrical energy to it.

[0022] In one embodiment of the present invention, the umbrella apparatus comprises a data storage device. The data storage device stores a user's digital data on the umbrella apparatus. Data stored on the data storage device is transferred to and from external, independently operative devices through the device-connection port.

#### ABSTRACT

A solar power beach umbrella apparatus is provided. The solar-powered beach umbrella apparatus comprises a solar collecting device attached to the umbrella canopy. The solar collecting device collects solar energy and converts it to electrical energy. Electrical energy passes through the power control system and is either used to power electrical devices independently operative from and external to the umbrella apparatus, used to power internal electrical devices that are part of the umbrella, or transferred to the power storage system where the electrical energy will be stored for later use. The solar power beach umbrella comprises an optional data-storage device that is electrically coupled to the power control system of the beach umbrella apparatus.

*Nice!*