Comments On The Claim Drafting Assignment Spring 2006

- I. General
- II. Lack of Clarity
- III. Formatting Errors
- IV. Method Claims
- V. Some Claim Examples:
- I. General
 - A. Good effort on everyone's part! I tried to make lots of commentsDon't panic if you didn't get the grade that you wanted.
 - B. People need to focus a little more on making sure that the claim limitations actually recite what they want them to, with regard to both grammatical construction and word choice.
 - C. Clarity first! Short is good, but it must be clear.Clear enough to exclude any interpretation that you don't want.
 - D. Format double space and space between claims

We want it to be easy for the Examiner to read and understand (and easy for me to make comments!)

Skip a line between claims

New independents start on a new page

1.25 margins are ok - 0.75 margins are not

Abbreviations Used

K=Kuelbs U.S. Pat. App. Pub. US 2006/0005869

L=Li U.S. Pat. No. 6,923,194

E= Examiner

II. Lack of Clarity

Making assumptions about how a reader will interpret the claim language instead of locking down the meaning in the claim.

Fix - Make sure you have the definition locked down in the claim

"You keep saying that word. I do not think it means what you think it means."

- "The Princess Bride"

1. Improper clause construction

Clause - "sensors of environmental conditions attached to said apparatus"

Literally recites that the conditions are attached to the apparatus.

Actually want to say that the sensors are attached to the apparatus

Revise:

"sensors of environmental conditions, wherein said sensors are attached to said apparatus."

"sensors of environmental conditions, said sensors attached to said apparatus"

Example - not what the drafter wanted to recite

"a sensor system of measuring weather variables docked to said structural portion."

Actually claims that the variables are docked to the structural portion

Example - drafter has mentally assigned a novel meaning to a blank variable attaching a solar panel substantially **in apposition to** the **surface area** of a flexible canopy.

Example - strange comma

"The umbrella apparatus of claim 1 further including a rechargeable battery, coupled to said umbrella apparatus and conductively coupled to the solar panel"

"The umbrella apparatus of claim 1 further including a rechargeable battery, wherein said rechargeable battery is coupled to said umbrella apparatus and conductively coupled to the solar panel"

"The umbrella apparatus of claim 1 further including a rechargeable battery, wherein said rechargeable battery is coupled to said umbrella apparatus and wherein said rechargeable battery is conductively coupled to the solar panel."

Also note that one clause uses "coupled" and one clause uses "conductively coupled" is there a difference? The claim drafter might think so, but the Examiner is NOT obligated to adopt that understanding. Did the drafter intend the first coupling to be mechanical? I don't know and neither does the Examiner.

"The umbrella apparatus of claim 1 further including a rechargeable battery, wherein said rechargeable battery is mechanically coupled to said umbrella apparatus and wherein said rechargeable battery is conductively electrically coupled to said the solar panel."

B. Unclear word choice

Watch out for "shortcut" words that seem to solve all of your problems, but really lead you into using the equivalent of "the Midwest" rather than "within the borders of the continental United States of America."

C. Getting hung up on the specification. The Inventor uses a term and the term is a bad one, but the term gets lodged in your memory and your basic understanding of the invention and keeps popping into your claim.

For example, "pole portion" why not just "pole" or "support pole"?

[&]quot;carried by the canopy"
"ambient temperature" (surrounding?)
"capable of keeping time"
"docked to"

D. Recitation of "or"

"display info stored in umbrella or sensed from environment"

Do you really need to recite all of those options to establish novelty or are you just reciting a description?

Don't use OR.

E. Make a positive recitation

Recite the invention in positive terms

The following should not appear in a claim: can, may, should, could etc.

"provides a user with the option to"

F. It is good to have a claim that is novel, yet recites few claim elements.

However, writing the claim using the least possible number words does not necessarily yield the fewest claim limitations.

Cramming claim limitations into adjectives doesn't buy you anything.

G. Think about levels of abstraction

We teach music storage and music transfer (in/out)

Why should we limit our claim to music storage? Even worse, why would we limit our claim to a specific type of music storage (MP3)?

Why can't we go up a level of abstraction from music storage and claim "data storage"? It's not in the prior art?

Same thing with the USB port - why not "data port"? I don't see any data going in/out of any umbrellas in the prior art

H. Claim recites "the output port provides 12V D/C current"

Anyone see the problem?

"power" "electricity"

I. Think about when infringement takes place

"wherein said umbrella is hand-held"

"wherein said umbrella is adapted to be held by the hand of a user"

III. Formatting Errors

- A. Use of comma in the preamble
 - OK "An umbrella apparatus comprising:"
 - OK "An umbrella apparatus, said apparatus comprising:"
 - NO "An umbrella apparatus, comprising:"

The claim is still an English sentence. You were misled by the sloppy claim drafting in the cited references.

B. Language establishing dependency

BEST - "The method of claim 1 wherein ..."

WHY? - "The method according to claim 1 wherein"

WHY? - "The method as recited in claim 1 wherein"

- C. Grammatical
 - 1. No possessives in claim

NO - " ... wherein the pole's side ..."

Spell it out - " ... wherein the side of the pole ..."

2. No contractions

NO - "isn't", "can't", etc.

3. No pronouns

NO - "it" - potentially indefinite - lock it down.

- 4. Remember claim structure and use of semicolons
 - 1. Preamble:

element 1; and

element 2.

Use commas when separating non-element clauses

1. Preamble:

element 1; and

element 2,

wherein element 2 is X.

5. Use only English words in claims

No "via"

D. Don't capitalize "claim" or bold number in dependents

BEST - "The method of claim 10 wherein ..."

Not - "The method of Claim 10 wherein ..."

- E. Spell out all abbreviations, like USB, D/C, at least in the independent claim. If you like, you can define the abbreviation in the independent claim and use the abbreviation in the dependents.
- F. No Ancient English

therethrough - is really "through"

thereto - is really "to"

therein - is really "inside"

- G. Put the dependents right after the independent that they refer to
 Use the following numbering convention
 - 1.0

1.1

1.2

2.0

2.1

H. STOP using the following

means

consist

mounted

integrated

being

providing (in method claims)

- I. Try to make a nice claim structure it's what the examiner expects
- J. Avoid "step of" similar to "step for" which may run afoul of 112, p6 like "means for"

You can usually just delete "step for"

- K. No slashes "time/temperature/humidity sensor"
- L. "A coupled with B" vs. "A coupled to B"

Does "with" mean "to" or "using"?

Are you using B as the mechanism that performs the coupling?

IV. Method Claims

A. No More "Providing"

Many of those that attempted method claims wrote the claims in a way that probably was not helpful for them. For example:

1. System 2. Method
A; providing A;
B; and
C. providing B; and providing C.

NO MORE "PROVIDING" AS A METHOD CLAIM ELEMENT

- 1. How does the scope of the method claim differ from that of the system claim? Who is the infringer of the method claim?
- 2. Writing your method claims in this way did NOT help you gain a deeper understanding of the point of novelty because you didn't put any thought into it.
- 3. One of the big points of writing method claims is to approach the PON a different way. That is, primarily through functionality rather than through structure. Some claim limitations are much easier to write functionally than structurally, and vice versa. The point it to try writing the limitations both ways in order to see which one works better.

For example, in your method claims, instead of attempting to recite the structure of the data port in relation to the structure of the pole, you can claim the data port by reciting the function - "a data port passing data".

Someone's elegant method claim:

1. A method for outputting electrical energy from an umbrella, said method including:

converting solar energy to electrical energy using a solar panel disposed on the canopy of an umbrella; and

outputting said electrical energy from said umbrella using an electrical output port.

Conversely, some limitations really only work as a structure or a function. For example, placing the solar panels on the fabric canopy does not change the function of the solar panels, just the structure of the umbrella.

8

V. Some Claim Examples:

- 1. An umbrella including:
 - a support pole;
 - a canopy support structure supported by said support pole;
- a canopy supported by said canopy support structure, wherein said canopy includes a canopy fabric; and

at least one solar panel attached to said canopy fabric.

- 1. An umbrella apparatus comprising:
 - a pole portion;
 - a canopy portion coupled to the pole portion;
 - an power control system within said pole portion;
 - at least one solar energy collector attached to said canopy;
 - a USB port;

wherein said USB port is integrated into said power control system.

TOP CLAIM

- 1. Note the recitation of both the canopy and the canopy fabric. Consequently, the Examiner would have to find both the canopy and the canopy fabric in the prior art. Also note the recitation of the attachment of the solar panel to the canopy fabric, rather than just the canopy.
- 2. Nice connection between elements
- 3. Don't necessarily need to recite "at least one"

BOTTOM CLAIM

1. "a pole portion;"

Pole portion vs. pole?

2. "a canopy portion coupled to the pole portion;"

Why use coupled rather than attached?

Do you mean anything other than mechanically?

"the" vs. "said" in next element

3. "an power control system within said pole portion;"

"a" not "an"

"said" pole portion - stay consistent with second element

"within" - does drafter mean "positioned inside"?

4. "at least one solar energy collector attached to said canopy;"

Don't need to recite "at least one"

Why use "attached here" when you used "coupled" in element 2?

No antecedent basis for "canopy" - only for "canopy portion"

No "and", even though this is the second to last claim element

5. "a USB port;

wherein said USB port is integrated into said power control system.

Why are we reciting the USB port? didn't we reach novelty when we recited the solar energy collector?

Should be using a comma to separate the non-element limitation

What does "integrate" mean?

Webster's II New College Dictionary (1995)

- 1. To make into a whole by bringing all parts together: UNIFY.
- 2. To join with something else: UNITE.
- 3. To open without restriction to people of all races or ethnic groups:

DESEGREGATE.

- 4. *Math*.
- a. To calculate the integrate of.
- b. To perform integration on.
- 5. To bring about the integration of (personality traits)

The Examiner is entitled to adopt ANY of the definitions above. Which definition you would PREFER him to adopt is irrelevant. Alternatively, the Examiner could just decide that your claim is not clear and reject you on that ground

What does the drafter mean by "USB port is integrated into said power control system?" Electrically connected to? Mechanically attached? Positioned inside?

- 1. An umbrella including:
 - a pole portion;
- a canopy mechanically coupled to said pole portion, the canopy having a plurality of support ribs;
- a rechargeable electrical power system for providing power to electrical devices, the electrical devices comprising electrical devices capable of electronically functioning without being connected to said umbrella; and

an electrical connection interface for conductively coupling said electrical devices to said electrical power system.

- 1. An umbrella apparatus, including:
 - a pole portion;
 - a canopy portion mechanically coupled to said pole portion; and
- a solar energy system having a solar collector affixed to said canopy portion's surface area.

TOP CLAIM

NOTE: No recitation of solar panels! Drafter is claiming an umbrella with a rechargeable power system that provides power to outside devices. This is a good insight - that you can separate (and separately claim) the "power output" aspect from the "solar" aspect.

1. "for providing" vs. "providing"

Sometimes viewed as indefinite, but OK here in light of last claim element "Adapted to"

2. "power system for providing power to electrical devices"

Recites plural devices - is actually reciting that multiple devices are powered at the same time

3. "capable of electronically functioning without being connected to said umbrella"

Turning to Li, if I remove the lights from the umbrella and then apply power to the lights, the lights will function. Consequently, the lights are capable of functioning without being connected to the umbrella.

Negative claim limitations are tricky

Don't use "being" - use "when not connected" (not that it is a great limitation) Electrical or mechanical connection??

4. "an electrical connection interface for conductively coupling said electrical devices to said electrical power system."

NOTE: The drafter avoids difficulties with regard to the positioning of the electrical connection by claiming the electrical connection functionally rather than structurally. That is, claiming the connection it provides rather than the fact that the interface is a connection through the outer surface of the pole.

"Conductively coupling" - electrical conduction? thermal conduction? mechanical conduction?

Again with the plural devices

BOTTOM CLAIM

1. Revise preamble

Eliminate leading "-"

numbering or lettering is ok

2. "affixed to said canopy portion's surface area."

No possessives - really reads "the surface area of said canopy portion"
Re-writing makes it clearer that the clause is lacking antecedent basis for
"the surface area"

What is "the surface area"?? Does any physical object NOT have surface area? NOTE: Here the drafter is recognizing that they need something more than just attaching the solar panel to the canopy (which is good), but they don't quite get there. The drafter is mentally placing a lot of weight on "surface area," but the Examiner can have a field day with it and can basically cite any prior art they want.

1. A solar umbrella including:

a pole portion;

an umbrella portion coupled to said pole portion, said umbrella portion having a plurality of rib members;

a canopy portion supported by said rib members; and a solar panel carried by said canopy portion.

- 1. A solar umbrella with charging capability, comprising:
 - (a) a pole;
 - (b) a canopy mechanically coupled to said pole;
 - (c) a solar panel disposed over said canopy; and
 - (d) a charge port for electrically charging an external electrical device, wherein said external electrical device is detachably connected to said charge port during charging.

TOP CLAIM

- 1. "coupled" mechanical? electrical? thermal? why not just recite "attached to"?
- 2. Umbrella includes an umbrella?
- 3. Why recite the "rib members"?
 Attempt to localize the canopy away from the pole?
- 4. NOTE: canopy portion is "supported by" ribs, not necessarily "attached to"
- 5. "carried by"

Webster's II New College Dictionary (1995)

- 1. To bear from one place to another: TRANSPORT
- 2. To make known, take, bring, or communicate (e.g., a message)
- 3. To serve as a means for the conveyance or transmission of.
- 4. To hold or bear while moving
- ... for a total of <u>26</u> definitions with which the Examiner can have a field day. Alternatively, (and quite reasonably) the Examiner can find the claim to be indefinite.

What did the drafter mean? "Supported by?" Not a bad choice, but probably not because the drafter already uses "supported" in the claim earlier.

BOTTOM CLAIM

- 1. Revise preamble
 - Use of comma
 - "with" vs. "having" "having" indicated possession, "with" can be proximity
- 2. "disposed over said canopy"
 - NOTE: This limitation actually recites that the solar panel is located vertically higher than the canopy. This is shown in K.
- 3. No connection between the charge port and any other elements, including solar panel. Consequently, claim is potentially indefinite
- 4. **"external electrical device" -** External to what?
 - Conversely, do we need to recite "external" at all?
- 5. "detachably connected" mechanical or electrical connection?