

instead of bending because the tense of the verb does not affect whether a claim is a proper method claim. Petitioner further argues that even if the past tense is not proper, she should not have been penalized six times for the same error.

(3) She should not have been penalized for the omission of the step of cutting the spring into a rectangle.

A minimum of three points, would be sufficient to give petitioner a passing grade of 70.

FACTUAL REVIEW

Part I, of the afternoon section was worth fifty-eight (58) points and was directed to drafting a response to an Office Action, and presented the following relevant facts:

Three inventors, Spark, Joule and Testube invent an electrochemical cell which is an improvement on an electrocell manufactured by the Battery Corporation. The Battery Corporation's electrocell includes a metal container, a porous cathode collector, and a tubular separator. The container and the cathode collector form a first terminal for the cell. The separator is made of non-woven glass fibers. The separator must have a porosity of at least 25%. There are also two half cylindrical anode members which form the anode. A flat "U" shaped spring member is provided which when inserted and compressed mechanically provides good contact between the anode, separator and cathode. Joule's contribution to the invention is to replace the anode members and flat "U"

shaped spring with a cylindrical spring on which a sheet of anode material has been wrapped before the spring was inserted by a mandrel into the axial cavity of the cell. Any means equivalent to the mandrel can be used to insert the spring. The essential steps of her invention include forming the compressed spring, wrapping the anode material over the spring, and inserting and releasing the spring in the axial cavity of the container.

The instructions to Part I state:

Prepare a complete response to the restriction requirement. Your claim must be the broadest method claim which includes all necessary steps to form a closed electrochemical cell containing an electrolyte solution and comprising metal container 2, separator 6, porous cathode collector formed from two half cylindrical annular members, anode 19, spring means 9 formed from a rectangular sheet of spring material, flanges 11 and 13, metal cover 37, and conductive lead 29.

Petitioner drafted a response to the Office Action. The response included a claim which recited:

3. A method of making an electrochemical cell comprising:
 - a. a metal container;
 - b. a porous cathode collector comprising carbon and a substance, sold under the registered trademark Teflon, molded into two half-cylindrical annular members which are inserted into the metal container and heated for two minutes at 360°F and then for twelve minutes at 390°F to firmly lock

the members in contact with the metal container;

c. a tubular separator placed inside the porous cathode collector;

d. a first sheet with two opposing edges forming an anode which is placed inside the tubular separator;

e. a second sheet forming a spring with two opposing ends bent to form a first and second flange, located inside the anode and encompassing an axial cavity;

f. a split mandrel with a slot in which the first flange is inserted and the mandrel is rolled along the second sheet until the second flange is reached and inserted in the slot;

g. the first sheet is wrapped around the spring aligning the opposing edges of the sheet with the flanges;

h. the mandrel is inserted into the axial cavity of the container;

i. a plastic push rod is used in the mandrel slot to push the flanges while the mandrel is extracted from the cavity to release the spring and anode assembly;

j. a conductive lead is fastened to the first flange;

k. a metal cover with a center to which the conductive lead is welded; and

l. an electrolyte solution is added to the container.

One point was deducted because the claim did not include a step of providing the metal container. A total of six points was deducted because the claim recited molded instead of molding, inserted instead of inserting, heated instead of heating, placed instead of placing in two places and bent instead of bending.

DECISION

I find no error in the decision by the Director that "providing a metal container" is essential to the process described because without the metal container no electrocell can be formed.

I find no error in the determination that the claim reproduced above by Petitioner is not a method claim as it does not recite steps to be taken to form an electrocell but rather elements of an electrocell. Petitioner cites Ex Parte Lewin, 154 USPQ 487 (Bd. App. 1966) for the proposition that method claims need not be in a particular voice or tense. However, the petitioner was penalized because the claim was not a method claim set out by a succession of steps not because of the tense of the verbs per se.

I also find no error in the decision by the Director that the forming of a rectangular sheet was necessary to the formation of the electrocell as it is the rectangular sheet which forms the spring which is the crux of Joule's contribution to the invention.

CONCLUSION

The Director's decision of August 25, 1992, is affirmed
and this petition is denied.


EDWARD R. KAZENSKE
Director of Interdisciplinary
Programs