Developing a Function-Means Tree

What functions will the design have? By what means will those functions be achieved?

It helps to go beyond the terminology and to know what you’re really trying to do.

- Think of the “functions” as what you must do.
- Think of the “means” as how you might do it.
- The Function-Means Tree is a tool for listing the primary functions of a design and various means of achieving those functions.
- The Function-Means Tree should flow out of the Attributes List, PCC, Objectives-Constraints Tree, and Design Specifications.

Before you start too far down the path of “brainstorming” various design alternatives...

- Determine the primary functions that are required.
  - Show these on the top level of the tree
- List various means by which each function may be implemented.
  - Show these on the next level of the tree
- Determine secondary functions that would result from implementing each of the means.
  - Show these on the next level of the tree
- The tree continues to alternate between means and functions until you reach a reasonable termination point.

Here is a partial Function-Means Tree for a cigarette lighter.