[0002]
There have been known small-sized electronic devices in which a battery such as a primary battery and a secondary battery is used as a power supply of a video recorder with an integrated camera, a transceiver, or the like. Since these batteries are easily obtainable, users can use the batteries lightheartedly and the use thereof can be facilitated. However, general users do not understand very well that the usable time of the batteries is significantly affected by temperature. When a user uses a small-sized electronic device including such a battery in a low-temperature condition such as, for example, a skiing area or a snowy mountain and the usable time of the battery is extremely reduced, therefore, the user has concern that the device may had a malfunction.
[0003]
In practice, the usable time under a low-temperature environmental at or below 0 degrees Celsius can be reduced to approximately 1/2 or shorter of the usable time under a normal-temperature environment around 20 degrees Celsius, for example. As one example, the difference in the duration time of a size AA alkaline battery between an environment at 25 degrees Celsius and an environment at 10 degrees Celsius is approximately 1/2 to 1/4.
[0004]
In order to solve such a problem, there has been proposed a battery with a packing member for distribution whose surface is provided with thermal behavior displaying means made of a temperature-sensitive material that changes its color according to temperature. A surface of the battery is also provided with such thermal behavior displaying means made of a temperature-sensitive material that changes its color according to temperature. Thereby, users can recognize the temperature at which the battery is being used according to the color change of the thermal behavior displaying means. By showing the usable time according to temperature, the use of the battery by users can be facilitated.

[0030]
FIG. 1 is a perspective view of an intermediate member 120 to which a collimation lens is bonded and fixed. The intermediate member 120 of Example 1 is provided, on a front side and a back side thereof, with recesses 121a and 121b which correspond to the shape of the collimation lens and to which the collimation lens is bonded. The intermediate member 120 is further provided with through holes 124 near each end of a main scanning direction for receiving screws. One of the through holes 124 is disposed line-symmetrically relative to the other through hole based on a line in a direction of an optical axis running through the center of the intermediate member 120 in the main scanning direction. With the arrangement of the through holes 124, the intermediate member 120 can be attached to the housing at an angle 180 degrees different around the optical axis from the angle of the previous attachment of the intermediate member 120, when the optical scanner is reused. Thus, the recess 121b on the back side of the intermediate member without a bonding adhesive can be used as a new surface to which the lens is

bonded.
[0031]
Preferably, surfaces of the recesses 121a and 121b are roughened so that the surface areas thereof will be larger than the area of an external peripheral surface of the collimation lens. When the surface areas of the recesses 121a and 121b are larger than the surface area of the collimation lens, the bonding adhesive can be prevented from being left in the recesses 121a and 121b and adhering to the collimation lens.

1. A linkage for the use in a framing structure of a collapsible umbrella, comprising:
an umbrella shaft (1), a first end of the umbrella shaft (1) including a ferrule, a second end of the umbrella shaft including a handle;
a fixed hub (5) fixed to the first end of the umbrella shaft (1);
umbrella ribs radially fixed to the fixing hub (5);
a movable hub (2) being movable in an axial direction of the umbrella shaft (1); and
auxiliary ribs (3) for connecting the movable hub (2) and the umbrella ribs,
the umbrella ribs comprising:
a plurality of connection ribs (6), one end of each connection rib (6) being rotatably fixed to a periphery of the fixed hub (5);
a plurality of drive levers (7), one end of each drive lever (7) being rotatably fixed to the other end of each connection rib (6); and
a plurality of main ribs (4), a middle portion in its axial direction of each main rib (4) being rotatably fixed to the other end of each drive lever (7),
the auxiliary ribs (3) axially supporting intersections between the connection ribs (6) and the main ribs (4), one end of each auxiliary rib (3) being rotatably fixed to a periphery of the movable hub (2), the other end of each auxiliary rib (3) being rotatably fixed to one end of each main rib (4) at a fixed hub side.