[0002] Some small electronic devices of a known art, such as a camera-integrated video tape recorder and a transceiver, use batteries as a power source, including a primary battery and a secondary battery. These batteries are so readily accessible to a user that the usability can be improved. However, general users have little understanding that the operating time of the batteries is strongly affected by temperature. Therefore, there has been a problem that the user anxiously question failure when the operating time is extremely shortened when using a small electronic device with the battery under low-temperature environments such as in a ski area and in a snow mountain.
[0003] In practice, for example, the operating time under an environment of a low temperature of 0 degree C or less can be reduced half or shorter as compared with the operating time under an environment of an ambient temperature of about 20 degrees C. Incidentally the battery duration of a AA alkaline dry cell under environments a temperature of 25 degrees C is reduced to about half or a quarter as compared with the same under a temperature of 10 degrees C.
[0004] In order to overcome the above-mentioned problem, there has been proposed a battery provided, on the surface of a packing member for distribution thereof, with a temperature characteristic indication means made of a temperature sensitive material which changes in color with temperature.
Further, the surface of the battery is provided with a temperature characteristic indication means made of a temperature sensitive material which changes in color with temperature.
In this way, the temperature at which the battery is used can be recognized from color changes of the temperature characteristic indication means, indicating an available operating time based on the temperature so that the usability can be improved.

[0030] Fig. 1 is a perspective view of an intermediate member 120 which is fixedly secured to a collimator lens. The intermediate member 120 according to the first embodiment is provided with recesses 121a and 121b which are formed respectively on the top and back surfaces and correspond to the collimator lens as seating faces for fixing the collimator lens. Further, the intermediate member 120 is provided with through-holes 124 for inserting screws, near both ends thereof in a main scanning direction. In the meantime, one through-hole 124 is formed symmetrically with respect to the other through-hole 124 with reference to a line of an optical axis direction extending through a central portion of the intermediate member 120A in a main scanning direction. The through-holes 124 formed in the above manner enable that when an optical scanning device is reused, the mounting position of the intermediate member 120 with respect to the housing can be changed by 180 degrees from the previous mounting position about the optical axis. Thus, the recess 121b on the back surface of the intermediate member 120 which is not applied with an adhesive can be used as new seating surface for fixing the collimator lens.
[0031] Preferably, the surfaces of the recesses 121a and 121b are so roughened that the

surface areas thereof are greater than that of the outer peripheral surface of the collimator lens. In this way, the greater surface areas of the recesses 121a and 121b enable an adhesive to stay in the recesses 121a and 121b, preventing the adhesive from attaching to the collimator lens.

What is claimed is:

1. A folding umbrella link mechanism for use in an umbrella framework structure, comprising:

an umbrella shaft 1 having a ferrule at one end and a handle on the other end;

a fixed wheel 5 fixed to an end of the umbrella shaft 1 in a direction in which the ferrule is disposed;

an umbrella rim fixed to the fixed wheel 5 in a radial fashion;

a movable wheel 2 movable in an axial direction of the umbrella shaft 1; and

a receiving rib 3 for coupling the movable wheel 2 to the umbrella rim,

wherein

the umbrella rim includes a plurality of coupling ribs 6, each coupling rib 6 being pivotably fixed at one end thereof to a peripheral portion of the fixed wheel 5, a plurality of drive rods 7, each drive rod 7 being pivotably fixed at one end thereof to the other end of the coupling rim 6 opposite to the fixed wheel 5, and

a plurality of main ribs 4, each intermediate part of the main ribs 4 in an axial direction being pivotably fixed to an end of the drive rod 7 opposite to the coupling rib 6, and

the receiving rim 3, at one end thereof, is pivotably fixed to a peripheral part of the movable wheel 2 and, at the other end thereof, is pivotably fixed to an end of the main rib 4 on the fixed wheel 5 side, and is supported at an intersection point with the coupling rib 6.