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(54) Temperature controlled camera case

(57) A camera case (1) including a temperature-controlling device (3) is disclosed. The temperature-controlling device may be a simple heater or may be more complex. It may be thermostatically controlled.

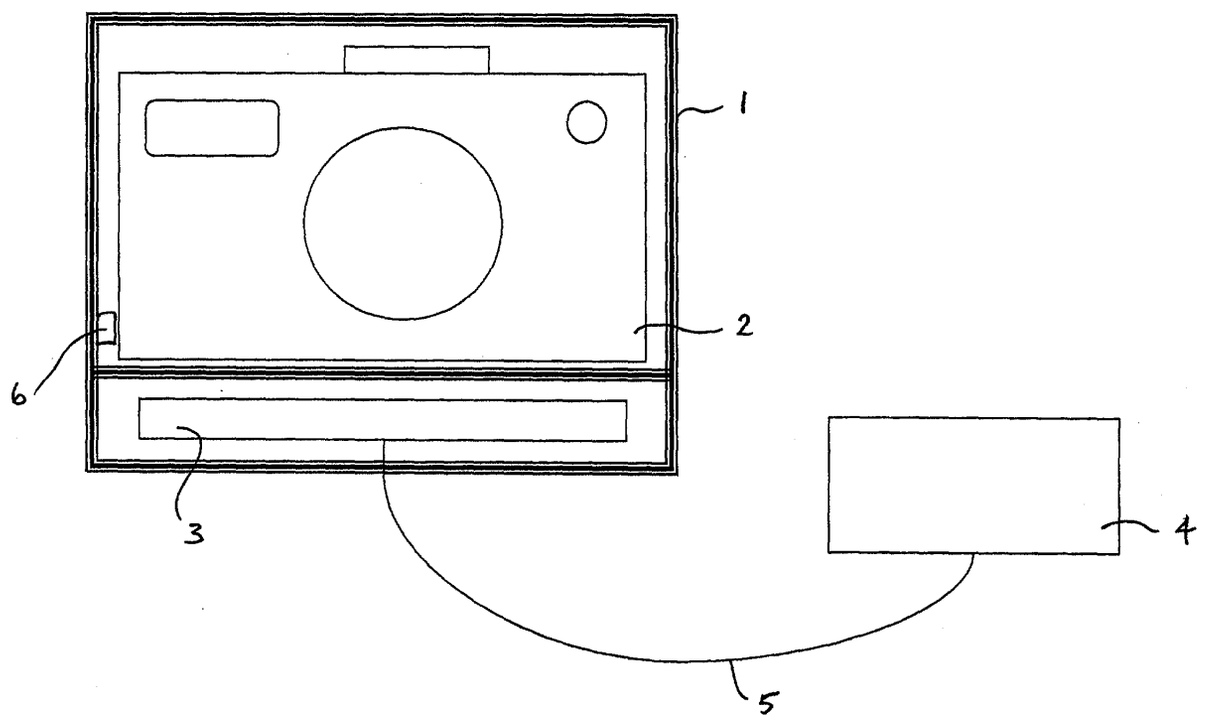


Fig. 1

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Description

[0001] This invention relates to optical equipment carrying cases. In particular, but not exclusively, it relates to a camera carrying case that includes a temperature-controlling device such as a heating element.

[0002] Optical equipment, such as cameras, video cameras, accessory lenses and so on, are often stored in a protective carrying case when not in use or when being transported by a user from one location to another.

[0003] A camera, in particular the lens system, is prone to the ambient conditions of the surrounding environment; when the camera body becomes cold, condensation can form on the lens. This may render the camera inoperable since any photographs taken will be unclear and clouded due to the presence of water droplets on the lens system. Conversely, if the surrounding temperature is too hot, the film and/or camera parts may become damaged or inoperable, again leading to the inability to take photographs.

[0004] The present invention arose in an attempt to solve some or all of the above problems.

[0005] According to the invention in a first aspect, there is provided a case for optical equipment, including a heater,

[0006] According to an aspect of the present invention there is provided a case for optical equipment, the case including a temperature control device for maintaining at a predetermined level the temperature within the case.

[0007] The case is preferably a portable case adapted for transporting, and housing when not in use, a still or video camera, or a lens or other optical accessory, or combinations of these.

[0008] Preferably, the temperature control device includes a heating element.

Alternatively, or additionally, the temperature control device includes a cooling element.

[0009] Preferably, the temperature control device is thermostatically controlled.

[0010] An embodiment of the present invention will now be described, by way of example only, with reference to the accompanying schematic drawing, in which:

Figure 1 shows, in schematic cross-section a camera case according to the present invention.

[0011] Referring to Figure 1, a camera case 1, for enclosing a camera 2, incorporates a temperature control device 3. The temperature control device is connected to a 12V power supply 4 via a power supply line 5. Alternatively, a power supply is included within the body of the camera case, and might, for example, comprise a battery or a plurality of batteries. In other embodiments, the internal battery supply is rechargeable through an external power line that is connected to a suitable recharging device.

[0012] The temperature control device includes a heating element and/or a cooling element for respectively raising and lowering the internal temperature of the case. The heating element may be a simple coil-type heater, or any other type of heating element. In certain embodiments, an integral thermostat 6 that is user-adjustable, for example, will regulate the temperature control device. This may be a simple mechanical thermostat, such as one incorporating a bi-metallic element, or may be a more complex one. It may be electronically controlled.

Claims

1. A case for optical equipment, the case including a temperature control device for maintaining at a predetermined level the temperature within the case.

2. A case as claimed in Claim 1, wherein the case is a portable case adapted for transporting, and housing when not in use, a still or video camera, or a lens or other optical accessory.

3. A case as claimed in Claim 1 or 2, wherein the temperature control device includes a heating element.

4. A case as claimed in Claim 1,2 or 3, wherein the temperature control device includes a cooling element.

5. A case as claimed in any preceding claim, wherein the temperature control device is thermostatically controlled.

6. A case as claimed in any preceding claim, including an external power supply.

7. A case as claimed in any Claim 1 to 5, including an internal power supply.

8. A case as claimed in Claim 6 and 7, wherein the power supply comprises at least one battery.

9. A case as claimed in Claim 8, wherein the battery is rechargeable.

10. A case for optical equipment, including a heater.

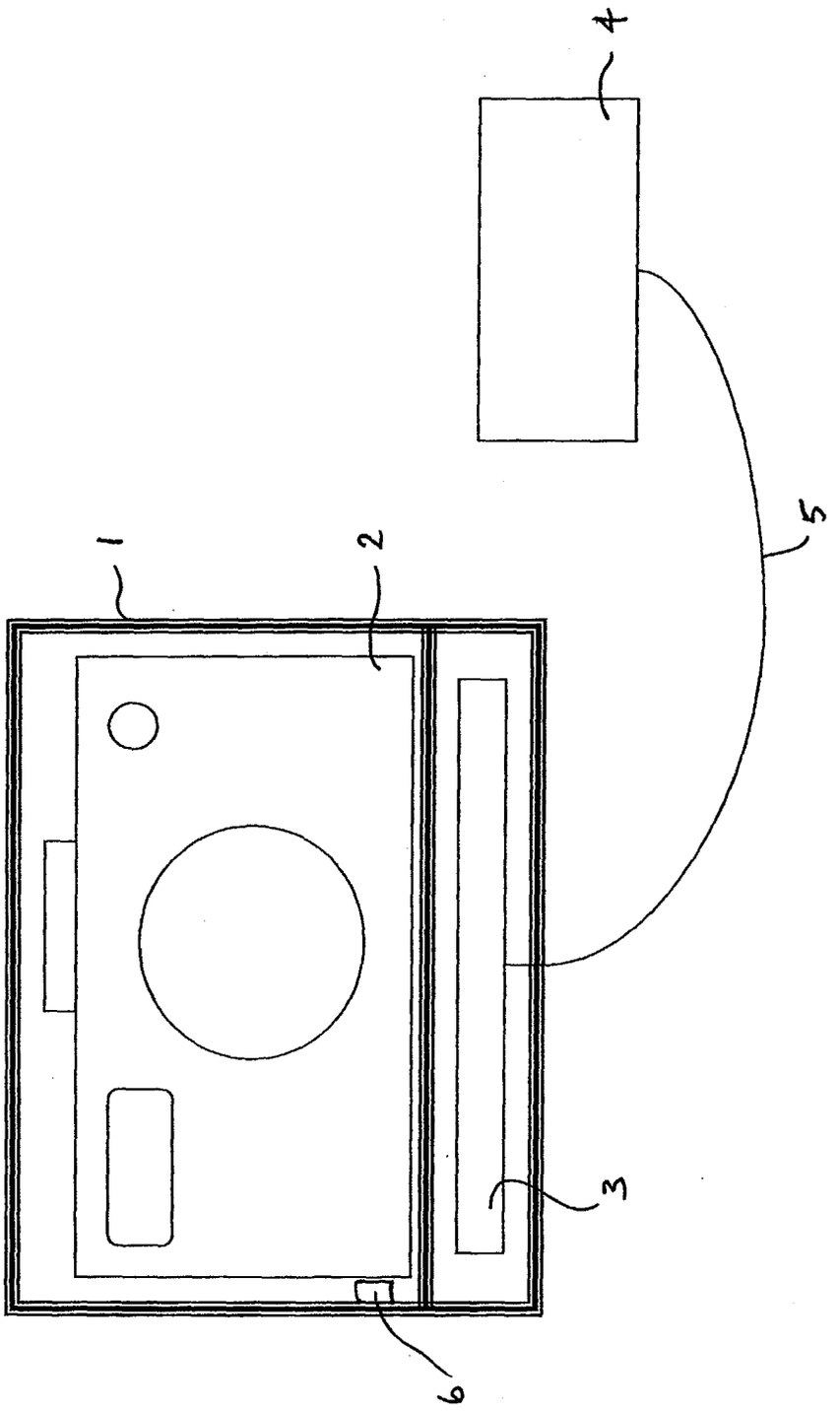


Fig. 1

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EUROPEAN SEARCH REPORT

Application Number
EP 04 25 1175

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	23 June 2004	Rückerl, R

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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