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(71) Applicant and
(72) Inventor: **KAPLAN, David, Michael** [AU/AU]; 14 Narrawong Road South, Caulfield, VIC 3162 (AU).

(74) Agent: **SYN, Roger**; ROGER SYN & CO., P.O.Box 777, 3 Epworth Court, Glen Waverly, Victoria 3150 (AU).

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(54) Title: PILLOW COVER

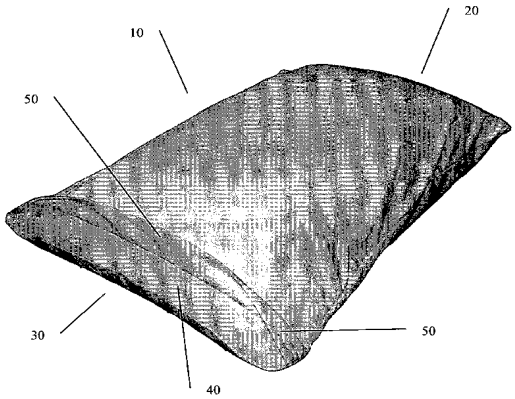

Figure 4C

(57) Abstract: A pillow enclosure-casing is used to enclose a pillow or pillow-filler material. The pillow casing has a vent through which air inside the pillow case is able to escape rapidly. Aside from the vent, the material of the rest of the casing, aside from the vent, is both moisture-impermeable as well as air-vapor-permeable. This material prevents airflow therethrough, and instead only allows air to pass through by an air-transfer processes that is significantly slower than air-flow. When the enclosure-

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Pillow Cover

Field of Invention

The present invention relates to pillows and/or pillow covers.

Background of the Invention

It is common for a person to rest his or her head on a pillow while sleeping. Pillows are usually covered with a pillow case or pillow protector. The pillows and pillow cases are usually made of a cloth fabric, and these materials are generally porous.

It is known that a substantial amount of moisture emanates from a person's head, and this moisture can end up being absorbed by the pillow. The moisture can originate either from the person's mouth, typically in the form of saliva, or also from the facial skin or scalp area. As a result, over a long period, this moisture can impregnate the fabric of the pillow, causing ugly staining on the surface of the pillow material.

Another disagreeable fact is that a substantial amount of skin debris comes off a person's head, and such skin debris tends to be deposited on the pillow. This skin debris can pass through the pores of the pillow fabric or pillow case, and thus accumulate inside. Anecdotally, it has been said that if the interior of a pillow is vacuumed, after the pillow has been used for several years without cleaning, there would be a considerable amount of accumulated skin debris.

Skin debris is a food-source for dust mites. The accumulation of debris inside the pillow or pillow case can attract dust mites to the pillow, with consequential disadvantages for the person's health.

An object of the present invention is to overcome or at least ameliorate one or more of the problems in the prior art, or to provide an improved alternative.

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Summary of Invention

According to the present invention, there is provided a pillow enclosure-casing adapted to fully enclose a pillow or pillow-filler material inserted therein, the enclosure-casing comprising:

a vent-arrangement through which air, that is trapped in the enclosure-casing when the pillow or filler is inserted and sealed therein, is able to escape rapidly therefrom;

wherein the material of the rest of the enclosure-casing, aside from the vent-arrangement, is a material that is both moisture-impermeable as well as air-vapor-permeable;

and wherein the material of the rest of the enclosure-casing, aside from the vent-arrangement, prevents airflow therethrough, and instead only allows air to pass therethrough by an air-transfer processes that is significantly slower than air-flow;

and wherein the vent-arrangement comprises material which has a composition that allows faster air-throughput therethrough compared to air-throughput capability of the material of the rest of the enclosure-casing such that, in use, when the enclosure-casing is pressed, the trapped air is able to escape rapidly from the enclosure-casing through the vent-arrangement.

Preferably, the vent-arrangement comprises a fabric material through which any trapped air in the enclosure-casing can flow therethrough to exit the enclosure-casing substantially faster through the vent-arrangement compared to the significantly slower rate of air-transfer achievable through the material of the rest of the enclosure-casing.

Preferably, the vent-arrangement is in the form of a fabric vent through which air can flow, and which fabric vent is made entirely of fabric and is therefore devoid of any structural or other physical components aside from the fabric material of the vent-arrangement.

Preferably, the material of the vent-arrangement and the material of the rest of the enclosure-casing, aside from the vent-arrangement, are both provided with identical

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color, pattern and ornamentation in order to not provide a visual indication to the user that the two materials are different.

Preferably, the material of the rest of the enclosure-casing, aside from the vent-arrangement, functions as a breathable, waterproof, liquid-and-skin-particle-barrier capable of preventing passage of liquid and skin particles therethrough into the interior of the enclosure-casing, while its air-permeability allows air to enter the pillow enclosure-casing interior.

The air-transfer processes may be significantly slower than air-flow and preferably is, or is akin to, osmosis and/or diffusion.

Preferably, the material of the rest of the enclosure-casing, aside from the vent-arrangement, comprises a polyurethane sheet material laminated to a fabric-layer.

Preferably, the fabric-layer is a knitted fibre made of eucalyptus wood material.

Preferably, the pillow enclosure-casing comprises an insertion-arrangement which includes a sealable opening through which the pillow or filler is able to be inserted into and sealed in the interior of the enclosure-casing.

The insertion-arrangement may be at a distal end of the enclosure-casing, and the vent-arrangement is the opposite distal end of the enclosure-casing.

The insertion-arrangement may comprise a zipper.

Preferably, the vent-arrangement is located on a lateral surface of the enclosure-casing.

Preferably, the amount of pillow-filler, or the amount of pillow-filler in the pillow that is inserted, can be varied by the user to vary the size of the pillow enclosure-casing in use.

Preferably, the trapped air is able to escape rapidly when the enclosure-casing and the pillow or filler therein is pressed in such a manner that air pressure in the enclosure-casing is temporarily increased.

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Drawings

In order that the present invention might be more fully understood, embodiments of the invention will be described, by way of example only, with reference to the accompanying drawings, in which:

Figure 1 is a side view of an embodiment of a pillow-cover, shown in use on a pillow;

Figure 2 is a perspective side view of the embodiment of Figure 1, seen from the same side as Figure 1;

Figure 3 shows a perspective view of the pillow-insertion-end of the embodiment of Figures 1 and 2;

Figure 4A shows an end view of the opposite side of the embodiment of Figures 1 to 3, namely the vent-end of the pillow;

Figure 4B is the identical view to Figure 4A, except here shown with the flap arranged in a slightly different manner;

Figure 4C is a perspective view of the embodiment of Figures 1 to 4B, oriented to show detail of the vent-end of the pillow (also seen in Figures 4A and 4B);

Figure 5 represents a notional cross-section of part of the fabric of most of the pillow-cover; and

Figure 6 represents a cross-section of the material used for the fabric vent.

In this provisional patent application, the views of Figures 1 to 4C are portions extracted from photographs of an embodiment.

In the embodiments, like components are labeled with like reference numerals merely for the sake of ease of understanding the different embodiments and modifications.

Description of Embodiments

Referring to the accompanying drawings, Figure 1 shows a side view of an embodiment of a pillow enclosure-casing in the form of a pillow-cover 10, shown in use

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