heat insular and/or reflective. It is important that the layer **16** be flexible and stretchable with the elastic bandage **12**. Note that the wires connecting the LEDs to a battery pack **20** are of extra length to allow stretching of the dimension between the LED strips. Power is supplied by the battery pack **20** received in battery pouch **22**. The LED lights **14** are spaced from direct engagement of the patient by an insular layer **24** which can range from a mesh cloth to a flexible sheet of formable material in which the strips are integrally molded.

[0030] In one embodiment the mesh cloth allows communication of the lamp radiation through to the patient without reflection.

[0031] In another embodiment the flexible formable material **24** can have apertures (not shown) functioning as a window to allow the light to pass through and the remainder can be of a light reflective surface. In this embodiment the LEDs are effectively hidden from the patient, where layer **24** is a mesh cloth that the patient can, of course, see the LEDs tips and the associated circuitry.

[0032] The subject system may also include control systems to vary light intensity, frequency or direction. A portable battery pack is included.

[0033] The subject adjustability may be implemented through "smart" processing and sensor systems for enhanced flexibility/adjustability in the form of adjustable energy output, adjustable wavelengths, priority zones, timers, and the like. The sensors of the sensor systems will enable the subject embodiments to have the ability to evaluate the treatment area and plan a smart treatment, utilizing more or less energy on the priority zones. The subject embodiments can be smart from the standpoint of body treatment area such as knee or back, and of skin type, age, overall severity of problems and have the ability to customize the treatment accordingly.

[0034] In yet another embodiment, the lamps are embedded in a flexible sheet of formable material and are integrally molded as strips within a material sheet.

[0035] With reference to Figs. 4A, 4B, 4C, 4D and 5, the LED bandage is shown where the LED strips are arranged in a diamond pattern and the elastic bandage is formed as a unitary sleeve which is pulled over the leg to the knee area. The multi-structural layer of the brace is shown in Fig. 5 to comprise an elastic bandage platform **50**, a first layer reference material that may be constructed of emergency blanket

WHAT IS CLAIMED IS:

1. A phototherapy system for delivering light-based skin therapy treatments to a treatment area comprising:

a primary fabric layer;

a battery pack attached to the primary fabric layer;

a plurality of therapeutic lamps;

a foam and reflective layer comprising a plurality of openings;

wherein the plurality of therapeutic lamps comprises a plurality of LED strips;

wherein the plurality of LED strips are mounted on the foam and reflective layer in a manner so that the LEDs are aligned with the openings and recessed relative to the opposite surface of the foam and reflective layer on which the LEDs are mounted;

wherein said LEDs communicate radiant energy to the treatment area through said openings, and

wherein the foam and reflective layer and the LED strips are highly flexible.

2. The system of claim 1 wherein the foam and reflective layer comprises a heat insulator and spacer.

3. The system of claim 1 or 2 wherein the foam and reflective layer is light reflective.

4. The system of any one of claims 1 to 3 further including a controller.

5. The system of any one of claims 1 to 4, wherein a reflective layer is attached on the foam and reflective layer.

6. The system of claim 5, wherein the reflective layer comprises a flexible foil suitable for reflecting the radiant energy of the lamps.

7. The system of any one of claims 1 to 6, wherein the foam and reflective layer is covered by a secondary fabric layer with a sheer mesh.