CLAIMS

What is claimed is:

1. A lighting device for light therapy, comprising

a) a light source adapted to illuminate in at least one direction; and

b) at least one light filter disposed in the at least one illumination direction of the light source, wherein the light filter comprising:

two or more layers of binder matrix; and

a multitude of irregularly shaped transparent crystals randomly dispersed in each layer of the binder matrix; wherein the multitude of transparent crystals have various shapes and sizes, and a particle size of each transparent crystal is between 0.01mm and 5mm;

whereby light from the light source passing through the multitude of irregularly shaped and randomly dispersed transparent crystals in the light filter is polarized into different orientations.

2. The lighting device of claim 1, wherein the light passing through the light filter is scattered and/or refracted, including multiple internal reflections and multiple polarization.

3. The lighting device of claim 1, wherein the binder matrix is made of a transparent polymer.

4. The lighting device of claim 1, wherein the transparent crystals are made of glass, crystals, plastic or silicon dioxide.

5. The lighting device of claim 3, wherein the transparent polymer is selected from the group consisting of polycarbonate, PMMA, polyethylene terephthalate, PETG, PVC, liquid silicone rubber, cyclic olefin copolymers, polyethylene, polystyrene, MABS, ionomer resin, polypropylene, FEP, SMMA, SAN, epoxy or a combination thereof.

6. The lighting device of claim 1, wherein the light filter comprises three layers of binder matrix.