CLAIMS

1. A color filter comprising:

a transparent substrate;

a plurality of colored pixels arranged on the transparent substrate;

a black matrix defining a grid around each colored pixel, wherein the grid comprises grooves that isolate any two adjacent color pixels from each other; and

a transparent conductive layer overlying the plurality of colored pixels, wherein the transparent conductive layer includes a network of a electrically conductive nanowires, wherein the transparent conductive layer at least partially conform to the grooves.

2. The color filter of claim 1 wherein each colored pixel is associated with a color.

3. The color filter of claim 2 wherein each colored pixel is associated with a primary color selected from red (R), blue (B) and green (G).

4. The color filter of claim 1 wherein the electrically conductive nanowires are silver nanowires.

5. The color filter of claim 1 wherein the black matrix is metallic or organic.

6. The color filter of claim 1 wherein each colored pixel is further divided into two or more subpixels, each subpixel being associated with a color.

7. The color filter of claim 6 wherein each subpixel is associated with a primary color selected from red (R), blue (B) and green (G).

8. An electronic device including:

a substrate having at least one surface relief feature; and

a transparent conductive layer overlying the substrate, the transparent conductive layer including a network of a plurality of electrically conductive nanowires wherein one or

more nanowires are at least partially contoured to the at least one surface relief feature of the substrate.

9. The electronic device of claim 8 wherein the substrate includes a plurality of color filter pixels having grooves therebetween.

10. The electronic device of claim 8 wherein the electrically conductive nanowires are metallic.