

## SPHERICAL VISUAL DISPLAY

In recent years, computer monitors and television screens have progressed from heavy, rigid vacuum tube technology to solid-state technology. This new technology allows very thin, light-weight, flexible screens to be made, and these are rapidly replacing the old vacuum tubes.

The new screens are still generally *flat* - indeed they tend to be even flatter than the old convex vacuum tubes. Flat screens are rather like open books that are held some distance in front of the eyes and gazed upon. However, the real world, which we encounter visually, is all around us and we rotate our eyes and head to capture the full experience. Computer games, TV and films attempt to recreate this world on a flat screen, and do so with ever greater success, but they would have even more success if the screen was all around the viewer - as is the case in the London Planetarium.

The invention described here relates to a large light-weight spherical (or almost spherical) shell or helmet - a bit like the helmet on a diving suit - sitting on the shoulders and surrounding the head. It may be constructed on a wire frame whose skeletal form is rather like the grid lines of longitude and latitude on a globe. Curved concave solid-state screens are cut to size and fixed in between the gaps in the rigid wire frame. These screens point inwards and display images which are synchronised with the images on the adjacent screens in order to produce an overall impression of a 3-dimensional world to the viewer, whose head is inside the shell of screens.

Given images of sufficient coherence and integrity, the wearer of this “*egghead*” will feel drawn into the virtual reality of computer games more than ever before, and 3D videos could visually transport the wearer to any suitably photographed panorama in the real world, or to any created place in a world of computer animation.

## CLAIM

A large spherical shell fitted with a patchwork of thin, concave, inward-pointing computer screens which can be used to convey an apparently seamless 3-dimensional impression to the wearer whose head is positioned inside the spherical visual display.

## ABSTRACT

### EGGHEAD VISUAL DISPLAY

The invention relates to a large light-weight spherical helmet - a bit like that on a diving suit - which sits on the shoulders and surrounds the head. It may be constructed on a wire frame whose skeletal form is rather like the grid lines of longitude and latitude on a globe. Concave solid-state screens are cut to size and fixed in the gaps in the wire frame. These screens point inwards and display images which are synchronised with the images on adjacent screens in order to produce an overall impression of a 3-dimensional world to the viewer, whose head is *inside* the shell of inward-pointing screens.