can be controlled by using adhesive (not shown) of a predetermined thickness, to attach the diffuser **(6)** to the display **(3)** surface. This is applicable for both embodiments using of a separate distinct diffuser **(6)** or one integrally formed with, or attached to the said retarder **(5)**.

[0103] It is envisaged that the biaxial polypropylene film thickness and variations in the manufacturing processes and/or constituents may affect some optical properties including the difference in refractive index for each polarisation axis, different frequencies and temperature. However, according to tests to date, biaxial polypropylene exhibits achromatic retarding properties.

[0104] It will be appreciated that although the preferred embodiment has been described with reference to a dual-screen liquid crystal display, the invention is not limited to same. It will also be apparent to those skilled in the art that the invention may be equally applicable to other optical systems benefiting from the said properties of a biaxial polypropylene retarder.

[0105] Furthermore, it will be understood that other materials may be used as retarders in such multi-focal plane displays provided they provide the first order retardive properties of biaxial polypropylene.

[0106] Aspects of the present invention have been described by way of example only and it should be appreciated that modifications and additions may be made thereto without departing from the scope thereof.

1. A multi-focal plane display including at least two at least partially overlapping display surfaces having a first order optical retarder interposed between at least two said screens.

2. A display as claimed in claim 1, wherein said first order retarder is a material with the optical properties of a biaxial polypropylene.

3. A display as claimed in claim 1 or claim 2, wherein said optical properties include those of a diffuser.

4. A display as claimed in claim 1 or claim 2, further comprising a diffuser formed as a distinct layer from said retarder.

5. A display as claimed in claim 4, wherein said diffuser is adhered to said display by adhesive of a predetermined thickness.

6. A display as claimed in any one of claims **1-5**, wherein said biaxial polypropylene is formed as a clear flexible film.

7. A display as claimed in any one of claims **1-5**, wherein said biaxial polypropylene is formed as a lacquer or coating.

8. A display as claimed in any one of the preceding claims, wherein said display surfaces are formed from liquid crystal display panels.

9. A display as claimed in any one of the preceding claims, wherein said retarder causes a phase angle retardation of less than or equal to one wavelength of light incident on said display.

10. A display as claimed in claim 9, wherein said retarder causes a linear displacement of less than or equal to 560 nm of said incident light.

11. A display as claimed in any one of the preceding claims, wherein said diffusive effects are formed by a means selected from the group comprising chemical etching; embossing; impressing: or calendering a random, non-periodic surface structure onto the diffuser surface.

12. A method of manufacturing a multi-focal plane display as claimed in any one of claims **1-11**, including the step of positioning a first order optical retarder between at least two partially overlapping display surfaces.

13. The method as claimed in claim 12 wherein said first order optical retarder sheet is formed from biaxial polypropylene.

14. A biaxial polypropylene layer adapted for use in an optical system as a first order retarder.

15. A multi focal plane display substantially as hereinbefore described, with reference to, and as shown in the accompanying drawing.

16. A method of manufacturing a multi-focal plane display substantially as hereinbefore described, with reference to, and as shown in the accompanying drawing.

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