CLAIMS

Claim 1:

A display apparatus, comprising:

a plurality of light-emitting element substrates, spliced into a sphere, wherein the sphere has a plurality of dummy latitudes and a plurality of dummy meridians, and each of the light-emitting element substrates comprises:

a base; and

a plurality of pixel structures, disposed on the base, wherein each of the pixel structures comprises a plurality of light-emitting elements for emitting different color lights;

the light-emitting element substrates comprising a first light-emitting element substrate, wherein the base of the first light-emitting element substrate is in an N-gonal shape, N is a positive integer greater than 4, the N-gonal shape has a first edge and a second edge, the first edge and the second edge are substantially parallel to the dummy meridians of the sphere respectively, a dummy reference line is located between the first edge and the second edge and is not parallel to the first edge and the second edge, the pixel structures of the first light-emitting element substrate comprise a pixel structure group, the light-emitting elements of the pixel structures of the pixel structure group are substantially arranged along a direction parallel to the dummy reference line.

Claim 2:

The display apparatus according to claim 1, wherein a connection line connecting a plurality of center points of the light-emitting elements of one of the pixel structure of the pixel structure group is substantially parallel to the dummy reference line.

Claim 3:

The display apparatus according to claim 1, wherein the N-gonal shape has a first vertex, and the dummy reference line passes through the first vertex.

Claim 4:

The display apparatus according to claim 3, wherein the first vertex is an intersection point of the first edge and the second edge, the N-gonal shape further has a second vertex, the second vertex is located opposite to the first vertex, and the dummy reference line passes through the first vertex and the second vertex.

Claim 5:

The display apparatus according to claim 3, wherein the N-gonal shape further has a third edge, the third edge is connected between the first edge and the second edge, the third edge is disposed opposite to the first vertex, and the dummy reference line passes through the first vertex and the third edge.

Claim 6:

The display apparatus according to claim 1, wherein the sphere further has a dummy pole, the dummy latitudes intersect at the dummy pole, the sphere further has a dummy equator, the first light-emitting element substrate is located between the dummy pole and the dummy equator, the light-emitting element substrates further comprise a second light-emitting element substrate, the second light-emitting element substrate is located between the first light-emitting element substrate and the dummy equator, the base of the second

light-emitting element substrate is in a trapezoidal shape, a lower base of the trapezoidal shape is substantially located on the dummy equator, and a portion of the dummy reference line substantially coincides with a lateral side of the trapezoidal shape.

Claim 7:

The display apparatus according to claim 6, wherein the dummy reference line and the first edge of the N-gonal shape comprise a first angle, two lateral sides of the trapezoidal shape comprise a second angle, and the first angle is an integer multiple of the second angle.

Claim 8:

The display apparatus according to claim 1, wherein the light-emitting elements of each of the pixel structures of each of the light-emitting element substrates comprise a first light-emitting element and a second light-emitting element, the first light-emitting element and the second light-emitting element are configured to emit a first color light and a second color light respectively;

the light-emitting element substrates comprise a second light-emitting element substrate, the pixel structures of the second light-emitting element substrate comprise a plurality of first pixel structures and a plurality of second pixel structures, the first light-emitting element and the second light-emitting element of each of the first pixel structures are arranged sequentially in a first meridian direction, the first light-emitting element and the second light-emitting element of each of the second pixel structure are arranged sequentially in a second meridian direction, the first meridian direction and the second meridian direction are substantially parallel to the dummy meridians, and the first meridian direction is opposite to the second meridian direction;

the first pixel structures and the second pixel structures of the second light-emitting element substrate are arranged into a plurality of pixel rows, a plurality of first pixel structures and a plurality of second pixel structures in each of the pixel rows are alternately arranged in a latitude direction that is substantially parallel to the dummy latitudes, and a sum of a number of the first pixel structures and a number of the second pixel structures in each of the pixel rows is an even number.

Claim 9:

The display apparatus according to claim 8, wherein the first pixel structures and the second pixel structures of the second light-emitting element substrate are arranged in a plurality of pixel columns, a plurality of first pixel structures and a plurality of second pixel structures in each of the pixel columns are alternately arranged in the first meridian direction.