## CLAIMS

1. An exposure apparatus, comprising: a light source, an illumination module, a mask stage, a projection objective module, an imaging position adjustment module and a wafer stage, disposed sequentially along a direction of light propagation, the imaging position adjustment module comprising a plurality of adjustment elements arranged individually, the projection objective module comprising a plurality of projection objectives each having an imaging field of view in positional correspondence with a respective one of the plurality of adjustment elements,

wherein each of the plurality of adjustment elements comprises an optical system, a motor-based actuation system and a control system, the control system configured to adjust the optical system by the motor-based actuation system so as to change the imaging field of view of a corresponding one of the plurality of projection objectives,

wherein the optical system comprises:

a first lens, having a first planar surface and a first curved surface;

a second lens, having a second curved surface facing toward the first curved surface and a third curved surface;

a third lens, having a fourth curved surface facing toward the third curved surface and a first bevel; and

a fourth lens, having a second bevel and a second planar surface, wherein the second bevel is arranged close and parallel to the first bevel, and wherein the second planar surface is parallel to the first planar surface.

2. The exposure apparatus of claim 1, wherein the optical system has parallel light-incident and light-exit surfaces, and wherein each of the plurality of adjustment elements is arranged within a back working distance of a corresponding one of the plurality of projection objectives.

3. The exposure apparatus of claim 1, wherein the optical system of each of the plurality of adjustment elements has an optical axis in coincidence with an optical axis

of a corresponding one of the plurality of projection objectives and a clear aperture greater than the imaging field of view of the corresponding one of the plurality of projection objectives.

4. The exposure apparatus of claim 1, wherein the optical system is configured to adjust at least one of a focal plane, magnification and translation of a corresponding one of the plurality of projection objectives by adjusting relative positions of at least one pair of adjacent ones of the lenses.

5. The exposure apparatus of claim 1, wherein the optical system comprises the first, second, third and fourth lenses or the fourth, third, second and first lenses disposed sequentially along the direction of light propagation.

6. The exposure apparatus of claim 1, wherein the first lens is a plano-convex lens or a plano-concave lens.

7. The exposure apparatus of claim 1, wherein the third lens is a plano-convex lens or a plano-concave lens.

8. The exposure apparatus of claim 1, wherein the second lens is a biconvex lens, a biconcave lens or a meniscus lens.

9. The exposure apparatus of claim 1, wherein each of the first, second, third and fourth lenses is a complete circular lens or part of a complete circular lens.

10. The exposure apparatus of claim 1, wherein the first curved surface has a radius of curvature equal to a radius of curvature of the second curved surface, and wherein the third curved surface has a radius of curvature equal to a radius of curvature of the fourth curved surface.

11. The exposure apparatus of claim 1, wherein the first curved surface has a radius of curvature equal to a radius of curvature of the fourth curved surface.

12. The exposure apparatus of claim 1, wherein each of the first, second, third and fourth curved surfaces has a radius of curvature ranging from 200 mm to 2000 mm.

13. The exposure apparatus of claim 1, wherein each of the first and second bevels has a wedge angle of from 0.5° to 10°.

14. The exposure apparatus of claim 1, wherein the optical system comprises at least one parallel plate, at least one wedge plate and at least one afocal air-spaced doublet.

15. The exposure apparatus of claim 1, wherein the optical system comprises a cooling system.

16. The exposure apparatus of claim 1, wherein the plurality of adjustment elements is mechanically interconnected into a unitary body.

17. The exposure apparatus of claim 1, wherein the plurality of adjustment elements is interconnected into a unitary body by using an integral frame.