What is claimed is:

1. A Wynne-Dyson projection lens having object and image planes and an image field, and that has reduced susceptibility to compaction and solarization from ultraviolet radiation, the Wynne-Dyson projection lens comprising along an optical axis:

a concave mirror having a concave surface;

a positive lens group spaced apart from the concave surface of the concave mirror;

first and second prisms made of either fused silica or BSM51Y and disposed adjacent the positive lens group opposite the concave mirror and on respective sides of the optical axis, with the first and second prisms having respective surfaces that reside adjacent the object and image planes;

wherein the positive lens group consists of:

a first lens group having a cemented doublet consisting of a plano-convex lens element made of either S-FPL51Y, S-FSL5Y or fused silica and having a planar surface in contact with the first and second prisms, and a negative meniscus lens made of either BAL15Y or BSM51Y; and

a second lens group spaced apart from the first lens group and consisting of either one or two lens elements each made of either S-FSL5Y, S-FPL51Y or fused silica; and

wherein the Wynne-Dyson projection lens has a numerical aperture NA in the range from 0.16 to 0.2, a unit magnification, is doubly telecentric and a Strehl ratio of > 0.95 over the image field for a spectral bandwidth that includes ghi radiation.

2. The Wynne-Dyson projection lens of claim 1, wherein the image field is 40 mm x 20 mm, and wherein the second lens group consists of the one lens element made of S-FSL5Y.

3. The Wynne-Dyson projection lens of claim 1, wherein the image field is 68 mm x 28 mm, wherein the NA = 0.16, and wherein the second lens group consists of the two spaced-apart lens elements.

4. The Wynn-Dyson projection lens of claim 3, wherein the most mirror-wise lens element of the second lens group has a most mirror-wise concave surface.

5. The Wynn-Dyson projection lens of claim 3, wherein the most mirror-wise lens element of the second lens group has a most mirror-wise convex surface.

6. The Wynn-Dyson projection lens of claim 1, wherein the first and second prisms are each isosceles prisms.

7. An optical lithography system for imaging a reticle onto a wafer coated with photoresist, comprising:

the Wynne-Dyson projection lens of claim 1, wherein the reticle resides at the object plane and the wafer resides at the image plane; and

an illuminator arranged to operably illuminate the reticle with the ultraviolet radiation.

8. A Wynne-Dyson projection lens having object and image planes and an image field, and that has reduced susceptibility to compaction and solarization from ultraviolet radiation, the Wynne-Dyson projection lens comprising along an optical axis:

a concave mirror having a concave surface;

a positive lens group spaced apart from the concave surface of the concave mirror;

first and second prisms made of either fused silica or BSM51Y and disposed adjacent the positive lens group opposite the concave mirror and on respective sides of the optical axis, with the first and second prisms having respective surfaces that reside adjacent the object and image planes;

wherein the positive lens group includes: a first lens element L1 made of S-FPL51Y, S-FSL5Y or fused silica; a second lens element L2 made of BSM51Y or BAL15Y; and a third lens element L3 made of S-FPL51Y, S-FSL5Y or fused silica; and

wherein the Wynne-Dyson projection lens has: a numerical aperture NA in the range from 0.16 to 0.2; a unit magnification; doubly telecentricity; and a Strehl ratio of > 0.95 over the image field for a spectral bandwidth that includes ghi radiation.

9. The Wynne-Dyson projection lens of claim 8, wherein the positive lens group further includes a fourth lens element L4 made of S-FPL51Y, S-FSL5Y or fused silica.

10. The Wynne-Dyson projection lens of claim 8, wherein the first and second lens elements define a cemented doublet, with the first lens element being plano-convex and contacting the first and second prisms.

11. An optical lithography system for imaging a reticle onto a wafer coated with photoresist, comprising:

the Wynne-Dyson projection lens of claim 8, wherein the reticle resides at the object plane and the wafer resides at the image plane; and

an illuminator arranged to illuminate the reticle with the ultraviolet radiation.

12. A Wynne-Dyson projection lens having object and image planes and an image field, and that has reduced susceptibility to compaction and solarization from ultraviolet radiation, the Wynne-Dyson projection lens comprising along an optical axis:

a concave mirror having a concave surface;

a positive lens group spaced apart from the concave surface of the concave mirror;

first and second prisms made of either fused silica or BSM51Y and disposed adjacent the positive lens group opposite the concave mirror and on respective sides of the optical axis, with the first and second prisms having respective surfaces that reside adjacent the object and image planes;

first and second lens elements that define a cemented doublet, wherein the first lens element has a planar surface in contact with the first and second prisms and that is made of either S-FPL51Y or S-FSL5Y, and wherein the second lens element is made of either BAL15Y or BSM51Y;

a third lens element spaced apart from the second lens element and made of either S-FSL5Y or S-FPL51Y; and

wherein the Wynne-Dyson projection lens has: a numerical aperture NA of 0.16; the image field is 40x20mm; a unit magnification; doubly telecentricity; and a Strehl ratio of > 0.95 over the image field for a spectral bandwidth that includes ghi radiation.

13. An optical lithography system for imaging a reticle onto a wafer coated with photoresist, comprising:

the Wynne-Dyson projection lens of claim 12, wherein the reticle resides at the object plane and the wafer resides at the image plane; and

an illuminator arranged to illuminate the reticle with the ultraviolet radiation.