providing a second set of holes is formed from said first end of a holed collimator to said second end of said holed collimator, the cross section of each hole of said second set of holes being of a second size that is different from said first size.

21. A diagnostic tool for performing optical interrogation of plasma during plasma processing, said diagnostic tool being configured for use inside a plasma processing chamber, said diagnostic tool comprising:

a first collimator;

a second collimator; and

a movement mechanism coupled with said second collimator for moving said second collimator relative to said first collimator.

~~22. A method for optical interrogation of plasma during plasma processing, said plasma processing being performed using a plasma processing chamber, said method comprising:~~

~~providing an optical viewport;~~

~~providing a collimator arrangement inside said plasma processing chamber, said collimator arrangement being coupled to said optical viewport, said collimator arrangement being configured with a first collimator on a first end and a second collimator on a second end, said first collimator and said second collimator being separated by a void area, said collimator arrangement including a movement mechanism coupled with said second collimator;~~

~~moving, using said movement mechanism, said second collimator relative to said first collimator; and~~

~~collecting optical signals from said plasma within said plasma processing chamber while a substrate is being processed.~~

~~23. A method for reducing deposition on an optical viewport during plasma processing, said plasma processing being performed using a plasma processing chamber, said method comprising:~~

~~coupling a collimator arrangement to said optical viewport, said collimator arrangement being disposed inside said plasma processing chamber, said collimator arrangement including at least a first collimator, a second collimator separated from said first collimator, and a movement mechanism coupled with said second collimator;~~

~~moving, using said movement mechanism, said second collimator relative to said first collimator; and~~

~~collecting optical signals, through said collimator arrangement, from said plasma within said plasma processing chamber while a substrate is being processed.~~

~~24. A method for reducing etching of an optical viewport during plasma processing, said plasma processing being performed using a plasma processing chamber, said method comprising:~~

~~providing a collimator arrangement inside said plasma processing chamber;~~

~~coupling said collimator arrangement to said optical viewport,~~
~~said collimator arrangement including at least a first collimator, a second collimator, a movement mechanism coupled with said second collimator, and a connecting member creating a void area between said first collimator and said collimator, a first end of said connecting member being attached to an edge of said first collimator, a second end of said connecting member being attached to an edge of said second collimator;~~

~~moving, using said movement mechanism, said second collimator relative to said first collimator; and~~

~~collecting optical signals, through said collimator arrangement, from said plasma within said plasma processing chamber while a substrate is being processed.~~

~~25.~~22. The diagnostic tool of claim 21 wherein said movement mechanism is configured for at least linearly translating said second collimator relative to said first collimator.

~~26.~~23. The diagnostic tool of claim 21 wherein said movement mechanism is configured for at least rotating said second collimator relative to said first collimator.

~~27.~~24. The diagnostic tool of claim 21 wherein said movement mechanism is configured for at least tilting said second collimator relative to said first collimator.

~~28.~~25. The diagnostic tool of claim 21 further comprising:

a connecting member creating a void area between said first collimator and said collimator, a first end of said connecting member being attached to an edge of said first collimator, a second end of said connecting member being attached to an edge of said second collimator; and

a housing, wherein said first collimator, said second collimator, and said connecting member are disposed inside said housing.

~~29.~~26. The diagnostic tool of claim 21 wherein a hole is formed from a first end of a holed collimator to a second end of said holed collimator, said holed collimator being one of said first collimator and said second collimator, the shape of a cross section of said hole being a polygon.

~~30.~~27. The diagnostic tool of claim 21 wherein a hole is formed from a first end of a holed collimator to a second end of said holed collimator, said holed collimator being one of said first collimator and said second collimator, the shape of a cross section of said hole being a triangle.

~~31.~~28. The diagnostic tool of claim 21 wherein a hole is formed from a first end of a holed collimator to a second end of said holed collimator, said holed collimator being one of said first collimator and said second collimator, a first end of said hole being located at said first end of said holed collimator, a second end of said hole being located at said second end of said holed collimator, the diameter of said first

end of said hole being different from the diameter of said second end of said hole.

~~32.~~29. The diagnostic tool of claim 21 wherein a hole is formed from a first end of a holed collimator to a second end of said holed collimator, said holed collimator being one of said first collimator and said second collimator, said hole including a first portion and a second portion, the diameter of a cross section of said first portion being different from the diameter of a cross section of said second portion.

~~33.~~30. The diagnostic tool of claim 21 wherein a hole is formed from a first end of a holed collimator to a second end of said holed collimator, said holed collimator being one of said first collimator and said second collimator, said hole having a tapered structure.

~~34.~~31. The diagnostic tool of claim 21 wherein

a first set of holes is formed from a first end of a holed collimator to a second end of said holed collimator, said holed collimator being one of said first collimator and said second collimator, the cross section of each hole of said first set of holes being of a first size, and

a second set of holes is formed from said first end of a holed collimator to said second end of said holed collimator, the cross section of each hole of said second set of holes being of a second size that is different from said first size.

~~35.~~32. The diagnostic tool of claim ~~34~~31 wherein a third set of holes is formed from said first end of a holed collimator to said second end of said holed collimator, the cross section of each hole of said third set of holes being of a third size that is different from said first size and is different from said second size.

33. A method for optical interrogation of plasma during plasma processing, said plasma processing being performed using a plasma processing chamber, said method comprising:

providing an optical viewport;

providing a collimator arrangement inside said plasma processing chamber,

said collimator arrangement being coupled to said optical viewport, said collimator arrangement being configured with a first collimator on a first end and a second collimator on a second end, said first collimator and said second collimator being separated by a void area, said collimator arrangement including a movement mechanism coupled with said second collimator;

moving, using said movement mechanism, said second collimator relative to said first collimator; and

collecting optical signals from said plasma within said plasma processing chamber while a substrate is being processed.

34. A method for reducing deposition on an optical viewport during plasma processing, said plasma processing being performed using a plasma processing chamber, said method comprising:

coupling a collimator arrangement to said optical viewport, said collimator arrangement being disposed inside said plasma processing chamber, said collimator arrangement including at least a first collimator, a second collimator separated from said first collimator, and a movement mechanism coupled with said second collimator;

moving, using said movement mechanism, said second collimator relative to said first collimator; and

collecting optical signals, through said collimator arrangement, from said plasma within said plasma processing chamber while a substrate is being processed.

35. A method for reducing etching of an optical viewport during plasma processing, said plasma processing being performed using a plasma processing chamber, said method comprising:

providing a collimator arrangement inside said plasma processing chamber;

coupling said collimator arrangement to said optical viewport, said collimator arrangement including at least a first collimator, a second collimator, a movement mechanism coupled with said second collimator, and a connecting member creating a void area between said first collimator and said second collimator, a first end of said

connecting member being attached to an edge of said first collimator, a second end of said connecting member being attached to an edge of said second collimator;

moving, using said movement mechanism, said second collimator relative to said first collimator; and

collecting optical signals, through said collimator arrangement, from said plasma within said plasma processing chamber while a substrate is being processed.