CLAIMS

1. A method comprising

measuring radiation reflected from a metrology target;

decomposing the measured radiation into components; and

applying a filter to the measured radiation, wherein the filter comprises an upper and a lower value, which defines an individual component.

2. A method according to claim 1, wherein decomposing the measured radiation is obtained with a Fourier transform of the measured radiation.

3. A method to measure a parameter of a lithographic process comprising

a) illuminating a metrology target with radiation,

b) detecting scattered radiation from the target,

c) changing a parameter of ~~the~~ metrology apparatus,

d) repeating steps a) to c) for a multitude of values of the parameter of the metrology apparatus,

e) decomposing the measured radiation into components, and

f) applying a filter to the measured radiation, wherein the filter comprises an upper and a lower value, which defines an individual component.

4. A method according to claim 3, wherein the decomposition is a Fourier transform.

5. A method according to claim 3, wherein the method further comprises

selecting the components smaller than a threshold ~~320~~.

6. A method according to claim 5~~3~~, wherein an~~the~~ overlay is generated using a reverse decomposition and utilizing only ~~the~~ selected components.

7. A method to measure a parameter of a lithographic process comprising

a) illuminating a metrology target with radiation,

b) detecting scattered radiation from the target,

c) changing a parameter of ~~the~~ metrology apparatus,

d) repeating steps a) to c) for a multitude of values of the parameter of the metrology apparatus,

e) decomposing the measurement obtained in step d) into individual components,

f~~e~~) applying a filter to the measurement ~~obtained in step d)~~, and

wherein the filter comprises an upper and a lower value, which defines an individual component.

~~8. A method according to claim 7 wherein the measurement obtained in step d) is decomposed in individual components.~~

~~9. A method according to claim 7 wherein filter 320 comprises an upper and a lower value, which defines an individual component.~~

~~10~~8. A method according to claim 7, wherein the filter ~~320~~ comprises an upper and

a lower value, which defines an interval of components.

~~11~~9. A method according to claim 7, _wherein the filter ~~320~~ is varied.