CLAIMS

~~1. Inspection~~

1. An inspection apparatus for inspecting an object ~~such as a pellicle for use in an EUV lithographic apparatus~~, the inspection apparatus comprising:

- a vacuum chamber;
- a load lock forming an interface between the vacuum chamber and an ambient environment;
- a stage apparatus configured to receive the object from the load lock and displace the object inside the vacuum chamber~~;~~,

wherein the vacuum chamber comprises a first parking position and a second parking position for temporarily storing the object.

~~2.~~ 2. The inspection apparatus according to ~~claim~~ claim 1, further comprising a transfer mechanism configured to transfer the object from the load lock to the stage apparatus and vice versa.

~~3.~~ 3. The inspection apparatus according to ~~claim~~ claim 2, wherein the transfer mechanism is at least partly arranged inside the load lock.

~~4.~~ 4. The inspection apparatus according to ~~claim~~ claim 2, wherein the transfer mechanism is mounted to the stage apparatus.

~~5.~~ 5. The inspection apparatus according to ~~any of the preceding claims~~ claim 1, wherein the load lock comprises a first door, a second door and a load lock chamber, the first door ~~being~~ configured to separate the ambient environment from the load lock chamber, and the second door ~~being~~ configured to separate the vacuum chamber from the load lock chamber.

~~6.~~ 6. The inspection apparatus according to ~~claim~~ claim 1, wherein the stage apparatus is configured to transfer an object from the stage apparatus to the first parking position and vice versa and wherein the stage apparatus is configured to transfer an object from the stage apparatus to the second parking position and vice versa.

~~7.~~ 7. The inspection apparatus according to ~~any of the preceding claims~~ claim 1, wherein the stage apparatus comprises a holder for holding the object.

~~8. Inspection~~8. An inspection apparatus for inspecting an object ~~such as a pellicle for use in an EUV lithographic apparatus~~, the inspection apparatus comprising:

- a vacuum chamber configured for the inspection of the object therein;

- a first load lock forming an interface between the vacuum chamber and an ambient environment;
- a second load lock forming an interface between the vacuum chamber and an ambient environment; and
- a stage apparatus configured to receive the object from the first load lock and displace the object inside the vacuum chamber and configured to provide the object to the second load lock.

~~9.~~ ~~Inspection~~9. An inspection apparatus for inspecting an object ~~such as a pellicle for use in an EUV lithographic apparatus~~, the inspection apparatus comprising:

- a chamber configured to provide ~~in~~ a conditioned atmosphere for inspecting the object;
- a load lock forming an interface between the chamber and an ambient environment;
- a radiation beam source configured to generate a radiation beam for inspecting the object; and
- a radiation beam measurement system configured to measure a characteristic of the radiation beam, wherein the radiation beam measurement system comprises:
  - ~~o~~ a member arranged in an optical path of the radiation beam between the radiation beam source and the object, the member comprising an aperture to allow part of the radiation beam to propagate to the object, and
  - ~~o~~ at least one radiation sensor arranged on the member and configured to measure the characteristic of the radiation beam along a path of the radiation beam toward the object.

~~10.~~ 10. The inspection apparatus according to claim 9, wherein the at least one radiation sensor is arranged along a ~~circumference~~periphery of the aperture.

~~11.~~ 11. The inspection apparatus according to claim ~~9 or 10, wherein the aperture has a substantially rectangular shape.~~

~~12.~~ ~~The inspection apparatus according to claim 11~~10, wherein the radiation beam measurement system comprises a radiation sensor along at least two sides of the aperture.

~~13.~~ 12. The inspection apparatus according to claim ~~11 or 12~~10, wherein the radiation beam measurement system comprises at least one radiation sensor along each side of the aperture.

~~14.~~ 13. The inspection apparatus according to ~~any of the claims~~ claim ~~9 to 13~~, wherein the radiation beam measurement system further comprises a spectral purity filter arranged upstream of the member in the optical path.

~~15.~~ 14. The inspection apparatus according to ~~any~~ claim ~~14~~13, wherein the spectral purity filter is mounted to the member.

~~16.~~ 15. The inspection apparatus according to ~~any~~ claim ~~14 or 15~~13, wherein the at least one radiation sensor is arranged downstream of the spectral purity filter.

~~17.~~ 16. The inspection apparatus according to ~~any of the claims~~ claim 9 ~~to 16~~, further comprising a detector configured to receive radiation caused by interaction of the radiation beam with the object.

~~18.~~ 17. The inspection apparatus according to ~~any~~ claim ~~17~~16, wherein the radiation comprises radiation transmitted by the object.

~~19.~~ 18. The inspection apparatus according to ~~any~~ claim ~~18~~17, wherein the detector is arranged downstream of the object.

~~20. The inspection apparatus according to any of the claims 17-19, wherein the detector comprises a CCD.~~

19. An EUV pellicle transmission measurement tool comprising ~~an~~the inspection apparatus according to ~~any of the claims~~ claim 9 ~~to~~ .

~~21.~~

~~22.~~ 20. An EUV pellicle transmission and reflection measurement tool comprising ~~an~~the inspection apparatus according to ~~any of the claims~~ claim 9 ~~to 20~~.