

11. The incubator of claim 10 wherein said predetermined level is between about 5 to 10%.

12. The incubator of claim 10 further including an airlock for permitting objects to be placed within or removed from said chamber without modifying substantially the makeup of the ambient gas within said chamber.

13. The incubator of claim 12 wherein said airlock includes:

- (a) a cavity extending through the enclosure of the chamber;
- (b) an interior door between said cavity and said chamber;
- (c) an external door between said cavity and the exterior of said chamber; and
- (d) means for permitting only one of said doors to be open at a time.

14. The incubator of claim 10 further comprising:

- (a) a microscope stage;
- (b) an aperture in said enclosure positioned for permitting a microscope mounted on said stage to extend through said aperture for use by a user in studying biological materials within said chamber;
- (c) means for sealing the annulus between the edge of said aperture and said microscope.

15. The incubator of claim 14 further including a storage compartment for storing objects within said

chamber and means for permitting circulation of ambient gas through said compartment.

16. The incubator of claim 5 further including means for controlling the concentration of carbon dioxide in the ambient gas within said chamber.

17. The incubator of claim 1 further including:

- (a) thermostatically controlled means for controlling the temperature of said ambient gas;
- (b) means for increasing the relative humidity of said ambient gas; and
- (c) means for circulating said ambient gas past said temperature controlling means and said humidity increasing means.

18. The incubator of claim 10 further including:

- (a) thermostatically controlled means for controlling the temperature of said ambient gas;
- (b) means for increasing the relative humidity of said ambient gas; and
- (c) means for circulating said ambient gas past said temperature controlling means and said humidity increasing means.

19. The incubator of claim 1 further including a storage compartment for storing objects within said chamber and means for permitting circulation of ambient gas through said compartment.

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