Claims

1. A method for categorizing a viral risk within an occupiable space, the method comprising the steps of:

measuring environmental data using a plurality of sensors within said occupiable space;

determining a virus index for the occupiable space based upon a combination of said environmental data, the virus index being a dimensionless measure of the ability of a virus to survive or propagate within the occupiable space;

providing a virus index scale, said scale including environmental categories corresponding to different viral indices, each environmental category representing a different level of likelihood of virus survival or propagation within the occupiable space;

comparing the virus index with the virus index scale, and so;

categorizing the viral risk of the occupiable space as one number; and

communicating the viral risk to stakeholders, wherein the communicating step includes a step of sending a signal to a control system, said control system then assessing operational steps required to maintain a safe viral risk condition of the occupiable space based on the viral risk.

2. The method according to claim 1, wherein the safe viral risk condition occurs when temperature is in a range of 19°C to 24°C, and relative humidity is in a range of 40% to 60%.

3. The method according to claim 1 or 2, wherein the communicating step includes displaying any one or a combination of colour, virus index, visual display or aural warning, corresponding to the viral risk.

4. The method according to any one of claims 1 to 3,
wherein the operational steps required to maintain the safe viral risk condition comprise operational steps to reduce the viral risk.

5. The method according to claim 4, further including the step of the control system operating equipment to reduce the viral risk.

6. The method according to any one of claims 1 to 5, wherein the environmental data includes levels for at least temperature and humidity.

7. The method according to claim 6, wherein the environmental data further includes levels for any one or a combination of: PM2.5, PM1, nitrogen dioxide, and CO_2.

8. A system for categorizing a viral risk within an occupiable space, the system comprising:
a plurality of sensors arranged to measure environmental data within said occupiable space;
a determination unit arranged to determine a virus index for the occupiable space based upon a combination of said environmental data, the virus index

being a dimensionless measure of the ability of a virus to survive or propagate within the occupiable space;

a virus index scale, said scale including environmental categories corresponding to different viral indices, each environmental category representing a different level of likelihood of virus survival or propagation within the occupiable space;

a comparison unit arranged to compare the virus index with the virus index scale, and further arranged to categorize the viral risk of the occupiable space as one number;

a communication unit arranged to communicate the viral risk to stakeholders and arranged to communicate a signal to a control system,

wherein the control system is arranged to assess operational steps required to maintain a safe viral risk condition of the occupiable space based on the viral risk.

9. The system according to claim 8, wherein the safe viral risk condition occurs when temperature is in a range of 19°C to 24°C, and relative humidity is in a range of 40% to 60%.

10. The system according to claim 8 or 9, wherein the communication unit includes a public display system arranged to display any one or a combination of colour, virus index or sound, corresponding to the viral risk.

11. The system according to any one of claims 8 to 10,

wherein the operational steps required to maintain the safe viral risk condition comprise operational steps to reduce the viral risk.

12. The system according to claim 11, wherein the control system is arranged to operate equipment to reduce the viral risk.

13. The system according to any one of claims 8 to 12, wherein the environmental data includes levels for at least temperature and humidity.

14. The system according to claim 13, wherein the environmental data further includes levels for any one or a combination of: PM2.5, PM1, nitrogen dioxide, and CO_2.