Claims

What is claimed is:

1. A detecting system for air's quality based on a robot, comprising:

a collection unit configured in a preset position on a robot, which is used to detect the air's condition in immediate surroundings of the robot, and then to form an output of collection data;

a processing unit connected to the collection unit, which is configured to receive the collection data and simultaneously receive the storage data which is output by a storage unit and is matched to the collection data, and then to form a processing result in accordance with the collection data and the storage data, as well as to simultaneously output a control signal;

a storage unit connected to the processing unit, which is configured to store the processing result;

an execution unit, whose control end is connected to the processing unit by a communication module to execute, under the effect of the control signal, actions that match the control signal;

an input/output device connected to the processing unit, which is used to receive and output the processing result, or to receive control instructions input by users, and then to form a control signal and transmit it to the processing unit; the collection unit comprises a temperature sensor, which is configured to collect temperature information of the immediate surroundings of the robot, and then to form an output of

temperature signals; if environment temperature is too low or too high, the processing unit sends out control command, according to present temperature signal, to adjust temperature adjustment device, to maintain the temperature at a level which people feel comfortable; when indoor temperature ascends continually and exceeds threshold preset by the processing unit, the processing unit determines heat source and sends a control signal to sprinkler, the sprinkler is then initiated; the sprinkler then sprays liquid at the heat source to cool down it,

the collection unit comprises a gas sensor, which is configured to collect gas composition, concentration information of immediate surroundings of the robot, and then to form an output of gas signals, the processing unit sends out control commands, according to present gas composition and concentration information, which is used to adjust air purification unit, then, in turn adjusts harmful gas in the air.

2. The detecting system for air's quality based on a robot as claimed in Claim 1, wherein the collection unit comprises a humidity sensor, which is configured to collect the humidity information of the immediate surroundings of the robot, and then to form an output of humidity signals.

3. The detecting system for air's quality based on a robot as

claimed in Claim 1, wherein the collection unit comprises a carbon dioxide sensor, which is configured to collect the carbon dioxide concentration information of the immediate surroundings of the robot, and then to form an output of carbon dioxide concentration signals.

4. The detecting system for air's quality based on a robot as claimed in Claim 1, wherein the collection unit comprises a dust sensor, which is configured to collect the dust concentration information of the immediate surroundings of the robot, and then to form an output of dust concentration signals.

5. A detecting method for air's quality based on a robot, wherein it comprises of the following steps:

(a) controlling a collection unit to detect the air's condition in the immediate surroundings of the robot, and to form an output of collection data; the collection data includes temperature information of the immediate surroundings of the robot, the collection data also includes gas composition, concentration information of immediate surroundings of the robot ;

(b) controlling a processing unit to receive the collection data and simultaneously receive the storage data that is output by a storage unit and is matched to the collection data, and to form a processing result in

accordance with the collection data and the storage data;

(c) controlling an input/output device to receive the processing result and output the corresponding processing result; (d) controlling the input/output device to receive control instructions input by the user, and to form a control signal and transmit it to the processing unit;

(e) making the processing unit to receive the control signal, and then forming the processing result in accordance with the control signal, the processing result is output; and execute step (c);

if environment temperature is too low or too high, the processing unit sends out control command, according to present temperature signal, to adjust temperature adjustment device, to maintain the temperature at a level which people feel comfortable; when indoor temperature ascends continually and exceeds threshold preset by the processing unit, the processing unit determines heat source and sends a control signal to sprinkler, the sprinkler is then initiated; the sprinkler then sprays liquid at the heat source to cool down it,

the processing unit sends out control commands, according to present gas composition and concentration information, which is used to adjust air purification unit, then, in turn adjusts harmful gas in the air.