[CLAIMS]

[Claim 1]

A pressure control device which maintains a pressure within a target of pressure control at a set pressure, the pressure control device comprising:

correction means for correcting a pressure signal, which represents the pressure within the target of pressure control that is detected by a pressure sensor, such that the pressure signal approaches a set pressure signal representing the set pressure;

comparison means for comparing the corrected pressure signal with the set pressure signal; and

valve drive means for controlling an opening and closing of a flow control valve based on a comparison result from the comparison means,

wherein the correction means is a filter circuit, a frequency characteristic of the filter circuit having a peak at a prescribed frequency, and correcting the pressure signal so as to raise a component of the prescribed frequency of the pressure signal.

[Claim 2]

The pressure control device according to claim 1, wherein the prescribed frequency is determined based on a relationship between a flow rate of a gas flowing through a pipe between the target of pressure control and the pressure control device and a volume of the target of pressure control and/or based on a length of the pipe.

[Claim 3]

The pressure control device according to claim 1 or 2, wherein when the pressure signal has a value greater than that of the set pressure signal and changes in a decreasing manner, the correction means corrects the pressure signal in such a manner that the value thereof becomes small.

[Claim 4]

The pressure control device according to claim 1 or 2, wherein when the pressure signal has a value smaller than that of the set pressure signal and changes in an increasing manner, the correction means corrects the pressure signal in such a manner that the value thereof becomes large.