[Patent Literature 1] JP 2725876 B

[Patent Literature 2] JP 4642602 B

[Patent Literature 3] JP 7-97106 B2

[Patent Literature 4] JP 8-215538 A

[Summary]

[0008a]

In an aspect of the present disclosure, there is provided a method for removing a halogen fluoride in a mixed gas, characterized by reacting a mixed gas containing the halogen fluoride including bromine or iodine and another gas component with a removing agent which is a chloride, bromide or iodide of an element selected from the group consisting of potassium, sodium, magnesium, calcium or barium.

[0008b]

In another aspect of the present disclosure, there is provided a quantitative analysis method for a gas component contained in a halogen fluoride mixed gas, characterized by reacting a mixed gas containing a halogen fluoride including bromine or iodine and another gas component with a removing agent, thereby removing the halogen fluoride in the mixed gas, further removing produced by-products and quantitatively analyzing a residual gas by a gas chromatograph,

wherein the removing agent is a chloride, bromide or

iodide of an element selected from the group consisting of potassium, sodium, magnesium, calcium and barium.

[0008c]

In a further aspect of the present disclosure, there is provided a quantitative analyzer for a gas component contained in a halogen fluoride mixed gas, comprising: a sample container filled with a mixed gas containing a halogen fluoride including bromine or iodine and another gas component; a halogen fluoride removing tank; a by-product removing tank; and a gas chromatograph, wherein a removing agent is filled in the halogen fluoride removing tank, and a residual gas obtained by removing the halogen fluoride and the by-products from a sample gas is introduced into the gas chromatograph.

[Technical Problem]

[0009]

According to the method in Patent Literature 4, a solid alkali dissolves or deliquesces due to water produced by reaction of a halogen fluoride with calcium hydroxide, so that slurry is produced, and therefore it has been possible that the slurry sometimes blocks the tubes through which substances move.

[0010]

The object of the present invention is to provide a method for removing which facilitates handling of an exhaust gas, by removing a halogen fluoride containing bromine or iodine in a state in which the possibility of such blocking is reduced.

[0011]

The further object of the present invention is to provide a quantitative analysis method and a quantitative analyzer for trace impurities accompanying halogen fluorides