

ABSTRACT

A GC/MS measurement under an ionization by an electron ionization method is performed for a target sample (S1). Peaks are detected on a chromatogram based on obtained data, and a mass spectrum corresponding to each peak is compared with a compound database to identify a compound (S2-S4). A compound identified with a low degree of similarity is extracted as the measurement compound. For this compound, a measurement window including the retention time of a peak corresponding to the compound is set, and a control program for performing an ionization by a chemical ionization method only within the measurement window is created (S5-S8). According to this control program, a GC/MS measurement for the target sample is performed, with the device controlled so that a reagent gas is supplied into an ionization chamber and a filament for generating thermions is energized within the measurement window, whereas the supply of the reagent gas is discontinued and the filament is deenergized within time ranges other than the measurement window (S9). Since no reagent-gas ion is generated within the time ranges other than the measurement window, the adhesion of the ions to the inside of the ionization chamber and other locations will be reduced. Accordingly, a stable measurement can be performed for a long period of time.

FIGURE 2