

METHOD OF TREATING WASTE DEVELOPMENT SOLUTION

Abstract

A method of treating waste developing solution by selecting a step of measuring the concentration of tetraalkylammonium (TAA) and the contents of metal impurities in the waste developing solution that contains a tetraalkylammonium hydroxide aqueous solution, and refining the waste developing solution depending upon the measured contents of metal impurities per the TAA to regenerate the TAA hydroxide aqueous solution that can be used as the developing solution, a step of disposing the waste developing solution, or a step of diluting the waste developing solution with the unused TAA hydroxide aqueous solution and refining the diluted waste developing solution to regenerate the TAA hydroxide aqueous solution that can be used as the developing solution, wherein the content of metal impurities of 50 ppm per the TAA is regarded to be a reference for selecting the step. This method makes it possible to refine the waste developing solution containing the TAA hydroxide discharged from the step of developing a photoresist maintaining stability for extended periods of time and, hence, to regenerate a highly pure TAA hydroxide aqueous solution that can be reused as the developing solution even for a step of developing a photoresist that requires a high degree of precision.

Fig. 1