ABSTRACT OF THE DISCLOSURE

SUBSTRATE PROCESSING APPARATUS

A substrate processing apparatus of accurately detecting an end point of substrate polishing using an acoustic sensor is disclosed.

The substrate processing apparatus for polishing a substrate by pressing the substrate against a polishing pad, includes: an acoustic sensor configured to detect an acoustic event occurring with polishing of a substrate and output the acoustic event as acoustic signals; a power-spectrum generator configured to generate power spectra from the acoustic signals, each of the power spectra indicating a spectrum of a sound-pressure level; a map updating device configured to generate a power spectrum map indicating a temporal change in power spectrum by arranging the power spectra in a time-series order; and an end-point determiner configured to detect a polishing end point of the substrate based on a change in the sound-pressure level in the power spectrum map.

FIG. 8