

ABSTRACT

FILM-THICKNESS MEASURING METHOD, FILM-THICKNESS MEASURING APPARATUS, POLISHING METHOD, AND POLISHING APPARATUS

5 The present invention relates to a film-thickness measuring method for detecting a film thickness by analyzing optical information contained in a reflected light from a substrate. The film-thickness measuring method includes producing a spectral waveform indicating a relationship between intensity and wavelength of reflected light from a substrate; performing Fourier transform processing on the spectral waveform to
10 determine strengths of frequency components and corresponding film thicknesses; determining local maximum values (M1, M2) of the strengths of the frequency components; and selecting, according to a preset selection rule, one film thickness from film thicknesses (t1, t2) corresponding respectively to the local maximum values (M1, M2). The selection rule is either to select an N-th largest film thickness or to select an
15 N-th smallest film thickness, and N is a predetermined natural number.

Figure 5