

ONLINE DETECTION METHOD AND SYSTEM FOR SURFACE CONDITION OF POLISHING PAD

ABSTRACT

5

An online detection method and system for the surface condition of a polishing pad. The online detection method comprises the following steps: an optical sensor (1) moving above a polishing pad (2), so as to acquire distance information between the optical sensor (1) and the surface of the polishing pad (2); according to the measured distance information, distinguishing
10 distribution conditions of liquid on the surface of the polishing pad (2), and correspondingly using different correction calculation formulas to calculate a depth value of a trench (21) in the surface of the polishing pad (2); comparing a corrected depth value of the trench (21) in the surface of the polishing pad (2) with a preset threshold value; and determining the depth condition of the trench (21) in the surface of the polishing pad (2), so as to determine whether the polishing pad (2) needs
15 to be replaced.

FIG. 1