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(71) Applicant (for all designated States except US): **BASF SE** [DE/DE]; 67056 Ludwigshafen (DE).

(71) Applicant (for MN only): **BASF (CHINA) COMPANY LIMITED** [CN/CN]; 300 Jiangxinsha Road, Shanghai, 200137 (CN).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **LI, Yuzhuo** [US/DE]; Wieblinger Weg 33/4, 69123 Heidelberg (DE). **CHU, Jea-Ju** [CN/—]; 2F, No. 5, Alley 36, Lane 258, Sec 6, Yangping N.R., Shilin District, Taipei City 111 (TW). **VENKATARAMAN, Shyam Sundar** [IN/—]; Yuanhua Rd., Zhongli City, Taoyuan County 320 (TW). **USMAN IBRAHIM, Sheik Ansar** [IN/US]; 32 maple Street, Apt 11, Potsdam, NY 13676 (US). **PINDER, Harvey Wayne** [US/US]; 5766 N. Lincoln Ave #301, Chicago, IL 60659 (US).

(74) Common Representative: **BASF SE**; 67056 Ludwigshafen (DE).

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(54) Title: AQUEOUS POLISHING COMPOSITION AND PROCESS FOR CHEMICALLY MECHANICALLY POLISHING SUBSTRATES FOR ELECTRICAL, MECHANICAL AND OPTICAL DEVICES

(57) Abstract: An aqueous polishing composition having a pH of 3 to 11 and comprising (A) abrasive particles which are positively charged when dispersed in an aqueous medium free from component (B) and of a pH of 3 to 9 as evidenced by the electrophoretic mobility; (B) anionic phosphate dispersing agents; and (C) a polyhydric alcohol component selected from the group consisting of (c1) water-soluble and water-dispersible, aliphatic and cycloaliphatic, monomeric, dimeric and oligomeric polyols having at least 4 hydroxy groups; (c2) a mixture consisting of (c21) water-soluble and water-dispersible, aliphatic and cycloaliphatic polyols having at least 2 hydroxy groups; and (c22) water-soluble or water-dispersible polymers selected from linear and branched alkylene oxide homopolymers and copolymers (c221); and linear and branched, aliphatic and cycloaliphatic poly(N-vinylamide) homopolymers and copolymers (c222); and (c3) mixtures of (c1) and (c2); and a process for polishing substrates for electrical, mechanical and optical devices.

