Superconducting Microcosmic Theory of high-Tc cuprates (II) LI Ping-Lin

School of Physics and Engineering, Zhengzhou University, Zhengzhou 450052, P. R. China

In the theory (I) we achieved "Electric Coupling" formulas and its relevant theoretic data, which are well accordant with the tested results, and we identify yet the microcosmic origin of such experimental observations as the stripe phase, pseudogap, beforehand pairing, the T_c suppressed by the curved CuO_2 planes, and even Y123 double T_c etc. This article, as Part (II) of our theory, discusses dynamic Superatom from "Phonon Driving" and its relevant theoretic calculations, such as V_{EP} (the velocity of Electron Pair) and R_{VC} (the radii of Vortex Current) in the typical cuprates for Y123, Tl2223, Tl2212, Tl2201, Bi2223, Bi2212 and LSCO, and D_{EPME} (the density of Electron Pair in Meissner Effect) and N_{dhH} (the number of disappeared holes in Hall effect) etc. Especially, some finite tested results validate effectively such theoretic data as R_{VC} for Y123, Bi2212, (Nb) and (PbIn), and N_{dhH} for Y123, Tl2223, Tl2212, Bi2223, Bi2212 and LSCO. Through the deep logic analyses, we conclude that "Zero Resistance", "Meissner Effect" and "superconducting Perpetual Current" all originate from "Phonon Driving". Significantly, we reveal that "superconducting Perpetual Current" may imply a profound physics meaning, which should perform an abnormal Thermal Effect. Such a theoretic prefiguration and more calculations are waiting for the experimental examinations.