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(xbpan@math.ecnu.edu.cn). *On a quasilinear system arising in the theory of superconductivity.*

We prove that the solution of a quasilinear system involving the curl operator is globally $C^{2+\alpha}$. This regularity was previously proved by Bates and Pan assuming some strong restrictions on the topology of the domain and on the boundary data. In this paper, we obtain the regularity result by a careful study of a related quasilinear Neumann problem for a scalar elliptic equation. (Received January 12, 2011)