1046-11-1030   **Qingquan Wu*** (`quwu@ucalgary.ca`), Department of Math. & Stat., University of Calgary, 2500 University Drive NW, Calgary, Alberta T2N 1N4, Canada. *Computing Fundamental Units in Bicyclic Biquadratic Global Fields.*

We compute the unit group of an arbitrary bicyclic biquadratic global field K, using Kubota's method. A unified treatment is given for two different types of global field. That is, computing the unit group of K can be reduced to computing the three unit groups of the three distinct quadratic subfields of K. Our main contribution is an infinite family of examples for every possible type of unit group. These examples are independent of the constant field of K. Finally, we discuss two applications of the unit group computation; one involves the Minkowski unit in K and the other the norm of the fundamental unit in certain real quadratic function fields. (Received September 14, 2008)

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