962-11-793   **Hamza Y Ahmad*** (`ahmadham@yahoo.com`), Department of Mathematics, Lincoln University, Lincoln University, PA 19352. *Witt kernels of inseparable quartic extensions.*

Let L/k be a field extension. The quadratic k-forms that split hyperbolically over L for the kernel of the homomorphism $\iota^* : W_q(k) \to W_q(L)$ between the Witt groups induced by the inclusion $k \hookrightarrow L$. We compute the Witt kernel in the case L/k is an inseparable quartic extension (and thus k has characteristic 2). In particular, we show that the Witt kernel in this case a Pfister ideal. A collection of 4 dimensional Pfister forms that generate the kernel is described explicitly. This extends the result in section 3 of [Lam, T. Y. ; Leep, D. and Tignol, J. P. :*Biquadratic and quartic extensions*. Publ. Inst. Hautes Études Sci. Publ. Math. **77**, 63–102 (1993)]. (Received September 26, 2000)