ADDENDA: NONSOLVABLE NUMBER FIELDS RAMIFIED ONLY AT 3 AND 5

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This note gives addenda for the article Nonsolvable number fields ramified only at 3 and 5 [1].

(1) Page 717, "On the assumption of the Generalized Riemann Hypothesis (GRH), the Odlyzko bounds [Mar82] imply that each of the fields we construct is totally imaginary": This immediately follows from the more general fact that the representations constructed from Hilbert modular forms are *odd*, so that the determinant of (any) complex conjugation is equal to -1; it thus follows that even in the projectivization, complex conjugation acts nontrivially, so the number fields so constructed are totally complex.

References

 Lassina Dembélé, Matthew Greenberg, and John Voight, Nonsolvable number fields ramified only at 3 and 5, Compositio Math. 147 (2011), no. 3, 716–734.

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