1011-20-53 **Bill Wickless*** (wickless@math.uconn.edu), Dept. Math., University of CT, Storrs, CT 06269.

*Multi-isomorphism for quotient divisible groups; connections with representations of rings.* Preliminary report.

A standard tool in the study of torsion-free finite rank abelian (tffr)groups A is the equivalence between finitely generated right E(A)-modules and summands of $A^k$. O'Meara and Vinsonhaler use this tool, along with representations of Noetherian rings, to create multi-isomorphic ($A^n$ isomorphic to $B^n$ for all n>1) but not isomorphic tffr groups A,B. We study multi-isomorphism in the class of quotient divisible (qd) mixed abelian groups. A group is qd if it is an extension of a finite rank free group by a torsion divisible group. Although qd and tffr groups are similar, the representation theory for endomorphism rings is not the same. Consequently, the multi-isomorphism situation is different as well. (Received August 08, 2005)