Richard Hammack* (rhammack@vcu.edu), Dept. of Math. and Applied Math., Virginia Commonwealth University, Richmond, VA 23284. Isomorphic components of direct products of bipartite graphs.

The direct product of two connected bipartite graphs $G$ and $H$ has exactly two components. These components may or may not be isomorphic, depending on $G$ and $H$. Ten years ago Jha, Klavžar and Zmazek proved that the components are isomorphic if one of $G$ and $H$ admits an automorphism that interchanges its partite sets, and they conjectured that the converse is true. We outline a proof of the converse. (Received September 17, 2008)