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Let A and B be two Hopf algebra extensions, and suppose that $A^{\text{co}H}$ and $B^{\text{co}H}$ are connected by a strict Morita context. We investigate when this Morita context can be lifted to a Morita context between A and B . To this end, we present a Structure Theorem for Hopf bimodules: the category of A - B -Hopf bimodules is equivalent to the category of modules over the cotensor product of A and B^{op} . We present applications to the Miyashita-Ulbrich actions and to Hopf subalgebras. As another application, we present a Hopf algebra version of an exact sequence due to Beattie and del Rio, connecting the graded Picard group of a strongly graded ring, and the stable part of the Picard group of its part of degree zero. (Received February 10, 2009)