1048-16-76 **Leonid Krop*** (lkrop@condor.depaul.edu), Department of Mathematical Sciences, DePaul University, Chicago, IL 60614. *Central quotients of Drinfel'd quantum doubles.*

For every Hopf algebra H and a ground field k the subgroup C of central grouplike elements gives rise to an exact sequence $k \to kC \to H \to H_c \to k$ in the category of Hopf algebras where $H_c = H/I$ with $I = (kC)^+H$. We call H_c the central quotient of H. Let R be a finite-dimensional pre-Nichols algebra in the category ${}^G_G\mathcal{YD}$ of Yetter-Drinfel'd modules over an abelian group G. Set $H = R\#kG$ and put D for the Drinfel'd double of H. We give a necessary and sufficient conditions for splitting of D into the tensor product of kC and its central quotient. We specialize to R of Cartan type and give a criterion for splitting of D in terms of the datum for R. We further treat the case of Lusztig's small quantum groups. (Received January 28, 2009)