Abstract. In this article, we prove that for any compact Kähler manifold M^n with real analytic metric and nonpositive bisectional curvature, there exists a finite cover M' of M such that M' is a holomorphic and metric fiber bundle over a compact Kähler manifold N with nonpositive bisectional curvature and $c_1(N) < 0$, and the fiber is a flat complex torus. This partially confirms a conjecture of Yau.