The Diophantine equation \( mA^2 + nB^4 = C^3 \).

If \( m, n \) and \( k \) are three non-zero integers which are pair-wise co-prime such that \((m + n) = k^3\), then the Diophantine equation \( mA^2 + nB^4 = C^3 \) has an infinite number of integral solutions for \((A, B, C)\). In this paper, we apply a technique to generate these solutions. Again, we give the conditions when \( mA, nB \) and \( C \) are pair-wise co-prime. (Received September 17, 2019)