In his striking 1995 paper, Borcherds found an infinite product expansion for certain modular forms with CM divisors. In particular, this applies to the Hilbert class polynomial of discriminant $-d$ evaluated at the modular $j$-function. Among a number of powerful generalizations of Borcherds’ work, Zagier made an analogous statement for twisted versions of this polynomial. He proves that the exponents of these product expansions, $A(n, d)$, are the coefficients of certain special half-integral weight modular forms. We study the congruence properties of $A(n, d)$ modulo a prime $\ell$ by relating it to a modular representation of the logarithmic derivative of the Hilbert class polynomial. (Received September 25, 2012)