We obtain bounds on fractional parts of binary forms of the shape

$$\Psi(x,y) = \alpha_k x^k + \alpha_l x^l y^{k-l} + \alpha_{l-1} x^{l-1} y^{k-l+1} + \cdots + \alpha_0 y^k$$

with $\alpha_k, \alpha_l, \ldots, \alpha_0 \in \mathbb{R}$ and $l \leq k-2$. By exploiting a variant of Weyl's inequality and inductive arguments, we derive estimates superior to those obtained hitherto for the best exponent σ, depending on k and l, such that

$$\min_{\substack{0 \leq x,y \leq X \\ (x,y) \neq (0,0)}} \|\Psi(x,y)\| \leq X^{-\sigma+\epsilon}.$$