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Some inequalities between order of the divisor class group and multiplicity of
rational surface singularities

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Let (V, p) be a complex analytic germ of a rational surface singularity, e its multiplicity and δ the order of its divisor class group. We will prove several inequalities which show that e is bounded by a function of δ and δ is bounded by a function of e . The proof uses ideas from Minkowski's theory of reductions of positive definite quadratic forms. This is a joint work with Vinay Wagh.