Title: The computation of the inverse of block-wise centrosymmetric matrices

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This paper presents a method to compute the inverse of block-wise centrosymmetric matrices. The method is based on the block diagonalization of each centrosymmetric matrix by a matrix reduced-order method and the application of a recursive algorithm for the inverse of the block diagonal matrices. It is shown that the method is more efficient than the LU decomposition method.

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