Computer Physics Communications 68 (1991) 331–345 North-Holland Computer Physics Communications

Analysis of electromagnetic scattering using a current model method

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Received 7 August 1990; in revised form 30 November 1990

Fictitious current models have been used extensively in recent years to facilitate a computational scheme for a variety of scattering problems. This paper reviews the basic philosophy behind this new approach and outlines the relevant formalism. A number of cases which shed light on various specialty aspects of the general technique are also described in some detail. The wide applicability and demonstrated success of the method are recorded.