## Abstract

This work is concerned with the development of a numerical method for computing the EM field acting in a unilateral linear asynchronous motor (L.A.M) without an inverse magnetic circuit, with and without a permanent magnet, the method does not take into account the longitudinal border effect. The scalar magnetic potential and the two dimensional vectorial current function are used to solve the field equations taking into account a volume distribution of current into driving body. To reduce space complexity during the numerical computation, a special grid with larger cells in the integration of weak field variations was used. Ill. 3, bibl. 11 (summaries in English, Russian and Lithuanian)