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COMPARISON OF DECAY FUNCTION AND MAPPED INFINITE BOUNDARY ELEMENTS USAGE IN OPTICAL MAMMOGRAPHY

ABSTRACT *Among the methods of finding approximate numerical solutions, Boundary Element Method is a valuable choice to analyze an infinite area. In such cases the so-called open boundary numerical model of the analyzed object is created. One of two types of infinite boundary elements can be used to receive results without accuracy losses and with significant reduction of the mesh size. Implementation of two main lines of infinite boundary elements development, its advantages and disadvantages will be discussed on the example of optical mammography screening examination for early detection of breast cancer.*

Keywords: *Boundary Element Method, Infinite Elements, Optical Tomography*