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Dirichlet problem for the two-dimensional Laplace equation in an arbitrary shaped bounded domain is considered. This domain is embedded in a circular domain using analytic continuation. This leads to an inverse problem for the boundary values of the unknown function on the circular domain. Wavelet regularization is used to solve the resulting ill-conditioned system. In this talk, we present the idea and conclude with couple of numerical results. (Received January 18, 2016)