

## NEIGHBORHOODS OF A NEW CLASS OF P-VALENTLY STARLIKE FUNCTIONS WITH NEGATIVE COEFFICIENTS

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Abstract. A certain subclass  $T^m(n,p,\alpha,\lambda)$  of p-valently starlike functions in the unit disk is introduced. By making use of the familiar concept of neigborhoods of p-valent functions, the author proves coefficient bounds and distortion inequalities, and associated inclusion relations for the  $(n,\delta)$  – neighborhoods of functions belonging to the class  $T^m(n,p,\alpha,\lambda)$ , which is defined by means of a certain nonhomogeneous Cauchy-Euler differential equation.

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Key words and phrases: p-valently starlike function, nonhomogeneous Cauchy-Euler differential equation,  $(n, \delta)$  – neighborhood, distortion inequality, convex functions.

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