NEW RESULTS RELATED TO THE CONVEXITY OF THE BERNARDI INTEGRAL OPERATOR

GEORGIA IRINA OROS

Abstract. In this paper we prove the convexity of the image of a close-to-convex function by the Bernardi integral operator given by

\[ L_\gamma(f)(z) = F(z) = \frac{\gamma + 1}{z^\gamma} \int_0^z f(t)t^{\gamma-1}dt, \quad z \in U. \tag{1} \]

This result extends the result obtained by N. Pascu in [9], where it has been shown that the Bernardi operator transforms a close-to-convex function into a close-to-convex function under certain conditions.


Keywords and phrases: Analytic function, univalent function, integral operator, convex function, close-to-convex function.

REFERENCES