

SOME COEFFICIENT INEQUALITIES RELATED TO THE HANKEL DETERMINANT FOR STRONGLY STARLIKE FUNCTIONS OF ORDER ALPHA

N. E. CHO, B. KOWALCZYK, O. S. KWON, A. LECKO AND Y. J. SIM

Abstract. In the present paper, the estimate of the Hankel determinant

$$H_{3,1}(f) := \begin{vmatrix} a_1 & a_2 & a_3 \\ a_2 & a_3 & a_4 \\ a_3 & a_4 & a_5 \end{vmatrix}$$

over the class \mathcal{S}_α^* , $0 < \alpha \leq 1$, of analytic functions f with $a_n := f^{(n)}(0)/n!$, $n \in \mathbb{N} \cup \{0\}$, such that $|\arg(zf'(z)/f(z))| < \alpha\pi/2$ for $z \in \mathbb{D} := \{z \in \mathbb{C} : |z| < 1\}$, is examined.

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