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AN APPLICATION OF GENERALIZED WRIGHT FUNCTION ON CERTAIN SUBCLASSES OF UNIVALENT FUNCTIONS

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Abstract: The primary aim of the present article is to determine some sufficient coefficient conditions for normalized generalized Wright functions belonging to certain families of analytic univalent functions in conic regions. We also obtain coefficient conditions for inclusion relations between these subclasses under a convolution operator. Finally, we introduce an integral operator involving with normalized generalized Wright functions and obtain some sufficient coefficient conditions for this integral operator belonging to families of univalent functions in conic regions.

Keywords and Phrases: Analytic functions, univalent functions, uniformly convex and starlike functions, generalized Wright functions.

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1. Introduction

Let $\mathcal{A}$ represent the family of function $f(z)$ of the form

$$f(z) = z + \sum_{n=2}^{\infty} a_n z^n, \qquad a_n \in \mathbb{C}, \tag{1.1}$$