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SOME PROPERTIES OF GENERALIZATION CLASSES OF ANALYTIC FUNCTIONS

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Abstract. Let $\overline{\mathscr{A}}(n)$ be the class of functions $f(z)$ of the form

$$f(z)=z+\sum_{k=1}^{\infty}a_{1+\frac{k}{n}}z^{1+\frac{k}{n}}\ \ (n=1,2,3,\cdots)$$

which are analytic in the open unit disc $\mathbb{U}$. If $a_{1+\frac{k}{n}}=0$ for $k\neq n,2n,3n,\cdots$, then $f(z)$ is given by $f(z)=z+\sum_{k=2}^{\infty}a_kz^k$. For such functions $f(z)\in\overline{\mathscr{A}}(n)$, some generalization classes $\overline{\mathscr{S}}^*(n,\alpha)$, $\overline{\mathscr{C}}(n,\alpha)$ and $\overline{\mathscr{R}}(n,\alpha)$ are defined. The object of present paper is to discuss some interesting properties of $f(z)\in\overline{\mathscr{A}}(n)$ concerning with subordinations and strongly functions.

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