Kubicka, Ewa; Poreda, Tadeusz
On the coefficients of the quasi-starlike maps of the unit polydisk in $\mathbb{C}^2$.  (English)
Zbl 0719.32007

Let $w = (w_1, w_2)$ be a map of the unit polydisk in $\mathbb{C}^2$ into $\mathbb{C}^2$ with the property $w(0) = 0$ and
$$\text{Re}(w_i(z_1, z_2)/z_i) \geq 0 \text{ for } 0 < \max(|z_1|, |z_2|) = |z_i|, \quad i = 1, 2.$$ Denote the class of all such functions by $P_0$.
The class $G^M_2$ consists of maps $g$ of the unit polydisk in $\mathbb{C}^2$ into $\mathbb{C}^2$ satisfying the condition
$$f(g(z)) = (1/M)f(z),$$
where $f$ is starlike (and properly normalized).
The authors examine the connections between the coefficients of functions of $G^M_2$ and $P_0$.

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MSC:

- 32A30 Other generalizations of function theory of one complex variable

- 30C45 Special classes of univalent and multivalent functions of one complex variable (starlike, convex, bounded rotation, etc.)

Cited in 1 Document

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- quasi-starlike maps
- coefficient connections
- unit polydisk