Kubicka, Ewa; Poreda, Tadeusz
On the coefficients of the quasi-starlike maps of the unit polydisk in $\mathbb{C}^2$. (English)
Zeszyt Nauk., Politechn. Łódź 531, Mat. 21, 57-68 (1989).

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

$$Re(w_i(z_1, z_2)/z_i) \geq 0$$

for $0 < \max(|z_1|, |z_2|) = |z_i|, \ i = 1, 2$.

Denote the class of all such functions by $P_0$.

The class $G_2^M$ 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 $G_2^M$ and $P_0$.

Reviewer: A. Russakovskii (Düsseldorf)

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.)

Keywords:

quasi-starlike maps; coefficient connections; unit polydisk