Some extremal problems the second type for partially non-overlapping domains.

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Let $r(B;a)$ – inner radius domain $B \subset \overline{\mathbb{C}}$ with respect to a point $a \in B$.

This work a study the following problem.

Problem. Let $n \in \mathbb{N}$, $n \geq 2$, $\gamma \geq 0$. Maximum functional be found

$$r^{\gamma}\left(B_0\,;\,0\right) \cdot \prod_{k=1}^{n} r\left(B_k\,;\,a_k\right),$$

where $A_n = \{a_k\}_{k=1}^{n}$ – arbitrary n-equiangular system points and $\{B_0, \{B_k\}_{k=1}^{n}\}$ – arbitrary set partially non-overlapping domains, $0 \in B_0$, $a_k \in B_k$, and all extremal the describe $k = \overline{1,n}$.

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