ABSTRACT

An efficient convergence test of a branched continued fraction with nonequivalent variables

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In this paper the convergence criteria of branched continued fraction with nonequivalent variables whose partial quotients are of the form

$$\frac{q_{i(k)}^{i_k}q_{i(k-1)}^{i_k-1}(1-q_{i(k-1)})z_{i(k)}}{1}$$

is established. As a results, convergence criterions for similar branched continued fractions with nonequivalent variables are established and the convergence domain for multidimensional g-fraction with nonequivalent variables in the polydisk is investigated.

The list of references contains 8 items.