

Development of a new cascade voltage-doubler for voltage multiplication

Abstract

For more than eight decades, cascade voltage-doubler circuits are used as a method to produce DC output voltage higher than the input voltage. In this paper, the topological developments of cascade voltage-doublers are reviewed. A new circuit configuration for cascade voltage-doubler is presented. This circuit can produce a higher value of the DC output voltage and better output quality compared to the conventional cascade voltage-doubler circuits, with the same number of stages.

Keyword: Cascade voltage-doubler; Voltage multiplication