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عنوان مقاله:

Harmonic Optimization in Single DC source Multi-Level Inverters using Bacteria Foraging Algorithm

محل انتشار:

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خلاصه مقاله:

This paper presents a new method to optimize harmonic stepped waveform for multilevel inverters using bacteria foraging algorithm. The method has the benefit of high rate of convergence and precision compared to other conventional optimization methods. The proposed technique can be applied to multilevel inverters with any number of levels. The goal of optimization is to eliminate some low order harmonics and to maintain the fundamental component at the desired value. As a case study, the method is implemented and tested on a 13 level inverter. Simulation results .show the effectiveness and flexibility of the proposed method

کلمات کلیدی:

Multi-Level Inverter, Harmonics, Bacteria Foraging Algorithm, Genetic Algorithm

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