IJDACR ISSN: 2319-4863



International Journal of Digital Application & Contemporary research Website: www.ijdacr.com (Volume 1, Issue 3, October 2012)

Fuzzy Logic Based Digital Pre-distorter to Linearize Power Amplifier for QAM Signals

Sugandha Khare

Bhagwan Swaroop Sharma

khare.sugandha@gmail.com

Bhagwan2084@gmail.com

Abstract — The development of wireless communication products is surprisingly rapid. The RF power amplifier (PA); an important element in transmitter units of communication systems and is expected to provide a suitable output power at a very good gain with high efficiency. But the nonlinearity of PA is not acceptable; this paper presents a fuzzy based digital pre-distortion technique to linearize the characteristics of power amplifier.

Keywords — Power Amplifier, Digital Pre-distorter, Fuzzy-Logic, Neural Network.