

Reconfigurability in an antenna system is a desired characteristic that has been the focus of much research in recent years. In this work, ohmic contact cantilever RF-MEMS switches are integrated with self-similar planar antennas to provide a reconfigurable antenna system that radiates similar patterns over a wide range of frequencies. The different issues encountered during the integration of the MEMS switches and the overall system design procedure are described herein. The final model radiates at three widely separated frequencies with very similar radiation patterns. The proposed concept can be extended to reconfigurable linear antenna arrays or to more complex antenna structures with large improvements in antenna performance.