

**A NOVEL MIXER WITH HIGH ORDER INTERMODULATION SUPPRESSION
AND ROBUST CONVERSION GAIN**

ABSTRACT

A circuit is disclosed for a receiver front-end for a Personal Handy Phone. The circuit consists of a high frequency mixer consisting of a cascade downmixer, tapped at the center, and followed by a common source intermediate (IF) amplifier. The combination of downmixer and IF amplifier provides a high third order intermodulation suppression and a robust conversion gain. The proposed circuit can also be applied to other FET technologies and other uses.

(Fig. 4)