

**A PEAK CLIPPING CIRCUIT PROVIDED IN A QUADRATURE MODULATOR
AND A METHOD OF CLIPPING PEAK LEVELS OF IN-PHASE AND
QUADRATURE SIGNALS**

ABSTRACT

In order to clip the levels of an incoming in-phase and quadrature signals; a comparator (449, 446) receives the in-phase signal, a clipping level (40), and an inverted clipping level (42). The comparator compares the level of the in-phase signal with each of the clipping level and the inverted clipping level, and generates a comparison result (45a, 45b). A selector (46a, 46b), in response to the comparison result, allows the in-phase signal to pass therethrough when the level of the in-phase signal exceeds the inverted clipping level and less than the clipping level, selecting the inverted clipping level when the level of the in-phase signal is less than the inverted clipping level, and selecting the clipping level when the level of the in-phase signal exceeds the clipping level. On the other hand, the level of the quadrature signal is limited using another comparator and selector in exactly the same manner as mentioned above.

Fig. 4.