CLAIMS

1. RF power amplifier comprising at least one transistor for amplifying an input signal in a useful band,

said transistor having a first feedback circuit determining its amplification gain, characterized in that it comprises a second feedback circuit including a capacitor, said second circuit being connected between the output and the input of said transistor via inductors, said inductors forming a filter with said capacitor, said filter being:

- transmitting in a base frequency band, in which noise is produced at the output of said transistor, so that a portion of said output noise is injected at the input of said transistor via said second circuit, and;
- isolating for the other frequencies, the base frequency band being below the useful band.

2. Power amplifier according to Claim 1, characterized in that said amplifier emitting a signal having a given carrier, a frequency band around said carrier, wherein it is desired to reduce the emitted noise, is a transposition of said base frequency band.

3. Power amplifier according to any one of the preceding claims, characterized in that said transistor being a field effect transistor, said feedback circuit is connected to the drain of said transistor via a first inductance and to the gate of said transistor via a second inductance.

4. System for transmitting and receiving radio frequencies, characterized in that it comprises a power amplifier according to any one of the preceding claims.