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(71) Applicant (for all designated States except US): **TELEFONAKTIEBOLAGET L M ERICSSON (PUBL)** [SE/SE]; S-164 83 Stockholm (SE).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **DALIPI, Spendim** [SE/SE]; Stupvägen 13, S-191 42 Sollentuna (SE).(74) Agent: **NILSSON, Charlotte**; Ericsson AB, Patent Unit 3G, Torshamnsgatan 21-23, SE-164 80 Stockholm (SE).

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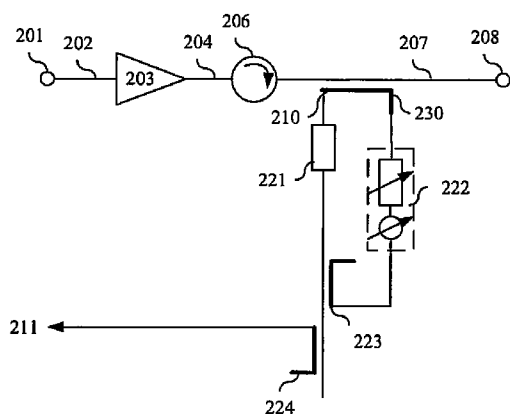


Fig. 2

(57) Abstract: A radio frequency transmitter comprises an amplifier, an antenna port, an isolator adapted to isolate an output of the amplifier from an interfering signal of the antenna port, a linearization loop and a transmission line comprising a first part (coupling a signal source to an input of the amplifier), a second part (coupling the output of the amplifier to an input of the isolator) and a third part (coupling an output of the isolator to the antenna port). The linearization loop is adapted to reduce non-linearity of the isolator and comprises a first directional coupler coupled to the third part of the transmission line, a loop impedance, and at least one further linearization loop element adapted to adjust a linearization signal and to feed the adjusted linearization signal to the transmission line. The radio frequency transmitter also comprises an interference reducing circuit adapted to reduce an influence of the interfering signal on the linearization loop. The circuit comprises a variable gain and phase shifter, and second and third directional couplers. The variable gain and phase shifter is coupled to the third part of the transmission line via the second directional coupler, which extracts a compensation signal from the transmission line, and is adapted to adjust amplitude and phase of the compensation signal based on the amplitude and phase of the interfering signal passing through the loop impedance. The third directional coupler couples the variable gain and phase shifter to the loop feed line and feeds the adjusted compensation signal thereto.

through the loop impedance. The third directional coupler couples the variable gain and phase shifter to the loop feed line and feeds the adjusted compensation signal thereto.