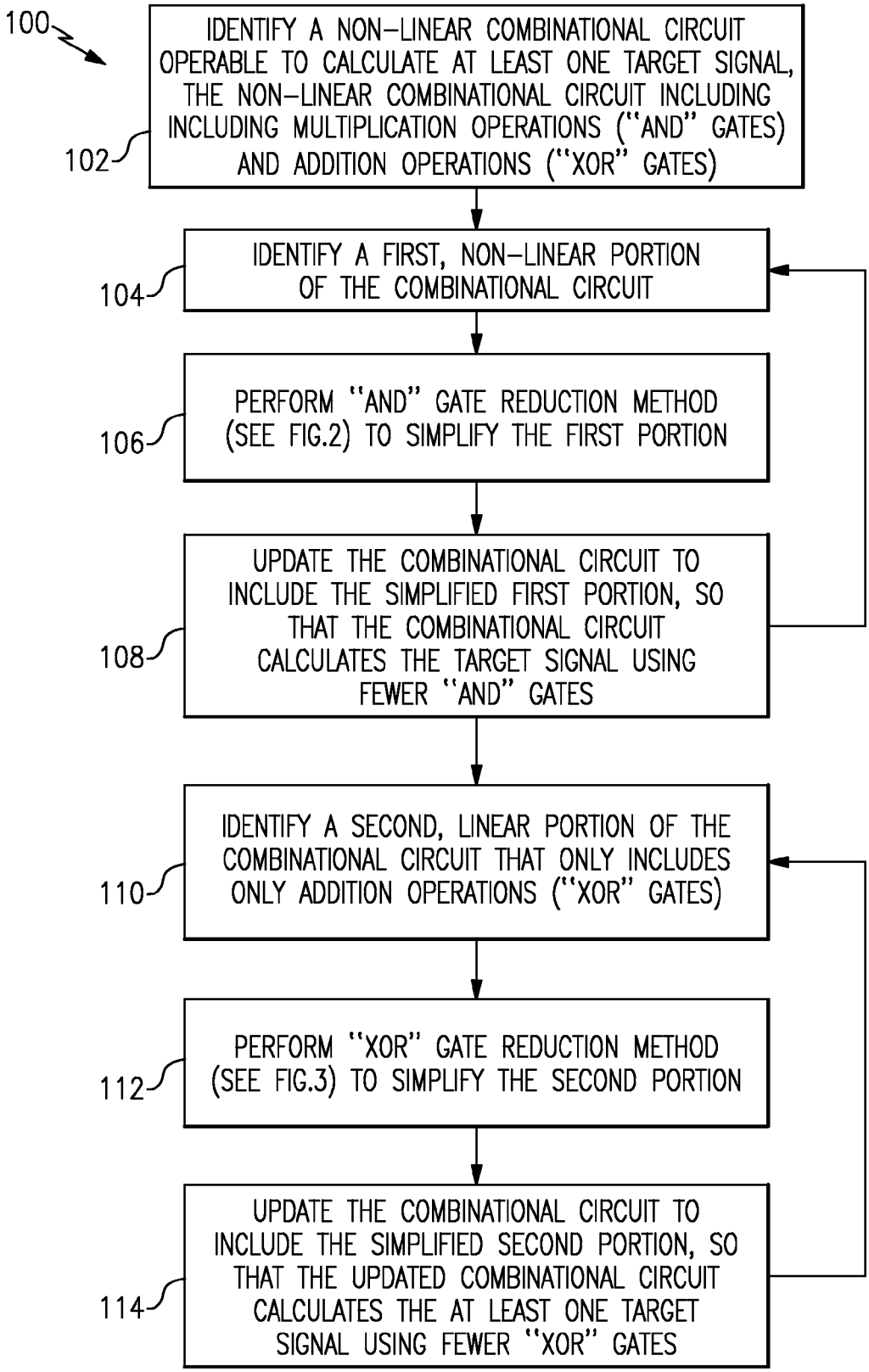
100
IDENTIFY A NON-LINEAR COMBINATIONAL CIRCUIT OPERABLE TO CALCULATE AT LEAST ONE TARGET SIGNAL, THE NON-LINEAR COMBINATIONAL CIRCUIT INCLUDING INCLUDING MULTIPLICATION OPERATIONS ("AND" GATES) AND ADDITION OPERATIONS ("XOR" GATES)
102
IDENTIFY A FIRST, NON-LINEAR PORTION OF THE COMBINATIONAL CIRCUIT
104
PERFORM "AND" GATE REDUCTION METHOD (SEE FIG.2) TO SIMPLIFY THE FIRST PORTION
106
UPDATE THE COMBINATIONAL CIRCUIT TO INCLUDE THE SIMPLIFIED FIRST PORTION, SO THAT THE COMBINATIONAL CIRCUIT CALCULATES THE TARGET SIGNAL USING FEWER "AND" GATES
108
IDENTIFY A SECOND, LINEAR PORTION OF THE COMBINATIONAL CIRCUIT THAT ONLY INCLUDES ONLY ADDITION OPERATIONS ("XOR" GATES)
110
PERFORM "XOR" GATE REDUCTION METHOD (SEE FIG.3) TO SIMPLIFY THE SECOND PORTION
112
UPDATE THE COMBINATIONAL CIRCUIT TO INCLUDE THE SIMPLIFIED SECOND PORTION, SO THAT THE UPDATED COMBINATIONAL CIRCUIT CALCULATES THE AT LEAST ONE TARGET SIGNAL USING FEWER "XOR" GATES
114

FIG.1