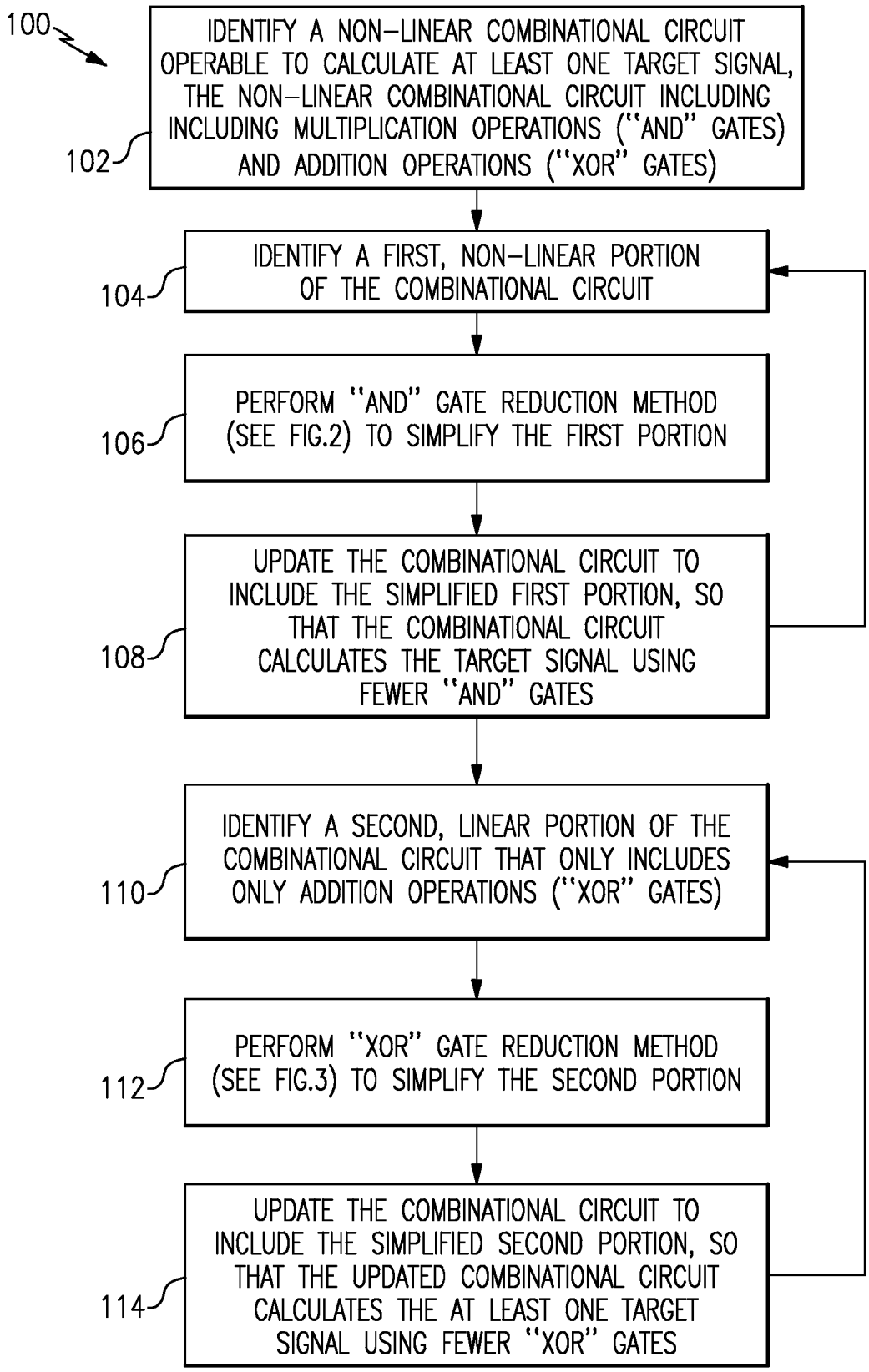
100
102
IDENTIFY A NON-LINEAR COMBINATIONAL CIRCUIT OPERABLE TO CALCULATE AT LEAST ONE TARGET SIGNAL, THE NON-LINEAR COMBINATIONAL CIRCUIT INCLUDING INCLUDING MULTIPLICATION OPERATIONS ("AND" GATES) AND ADDITION OPERATIONS ("XOR" GATES)
104
IDENTIFY A FIRST, NON-LINEAR PORTION OF THE COMBINATIONAL CIRCUIT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

FIG.1