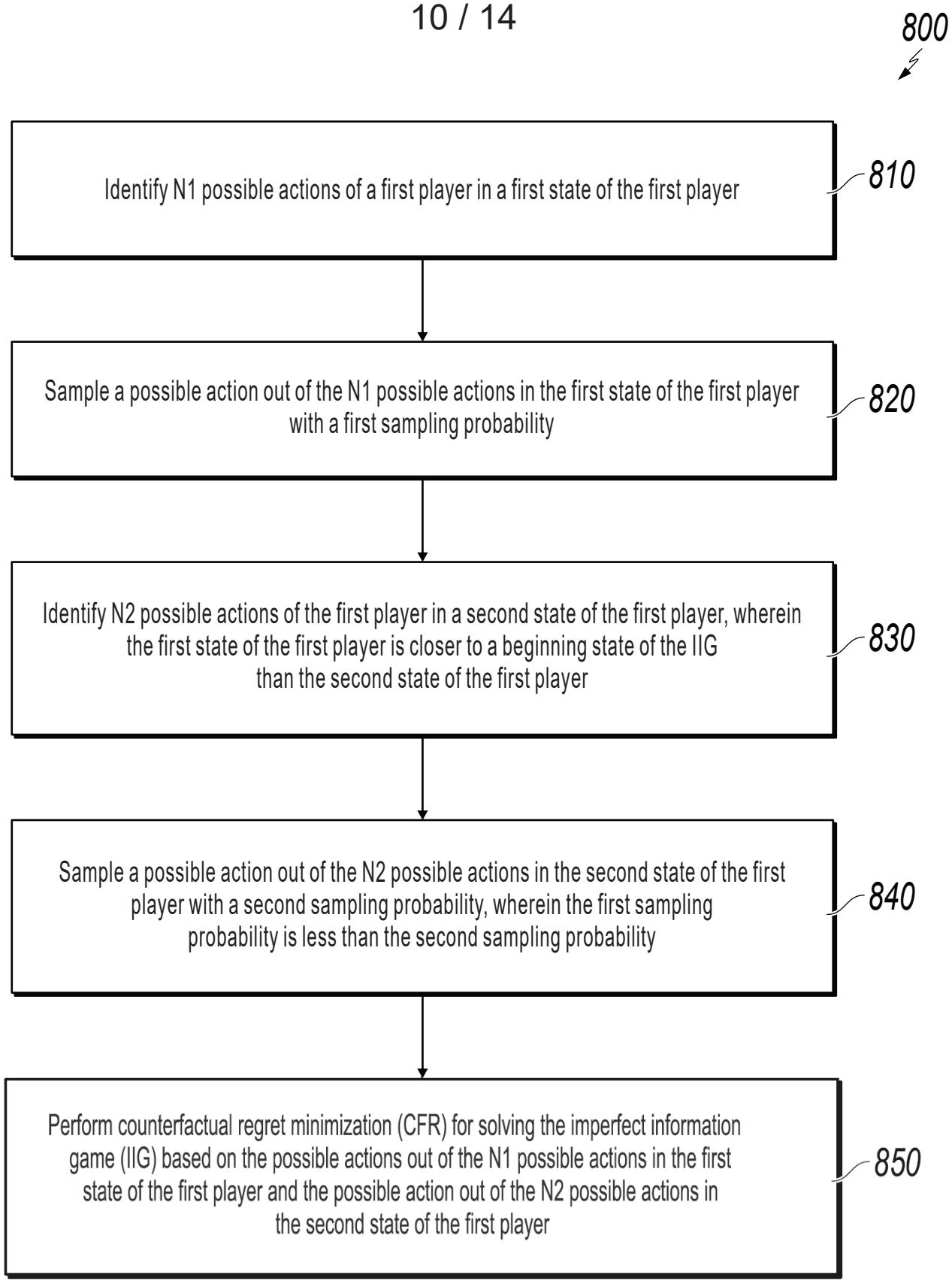
800
Identify N1 possible actions of a first player in a first state of the first player
810
Sample a possible action out of the N1 possible actions in the first state of the first player with a first sampling probability
820
Identify N2 possible actions of the first player in a second state of the first player, wherein the first state of the first player is closer to a beginning state of the IIG than the second state of the first player
830
Sample a possible action out of the N2 possible actions in the second state of the first player with a second sampling probability, wherein the first sampling probability is less than the second sampling probability
840
Perform counterfactual regret minimization (CFR) for solving the imperfect information game (IIG) based on the possible actions out of the N1 possible actions in the first state of the first player and the possible action out of the N2 possible actions in the second state of the first player
850

FIG. 8

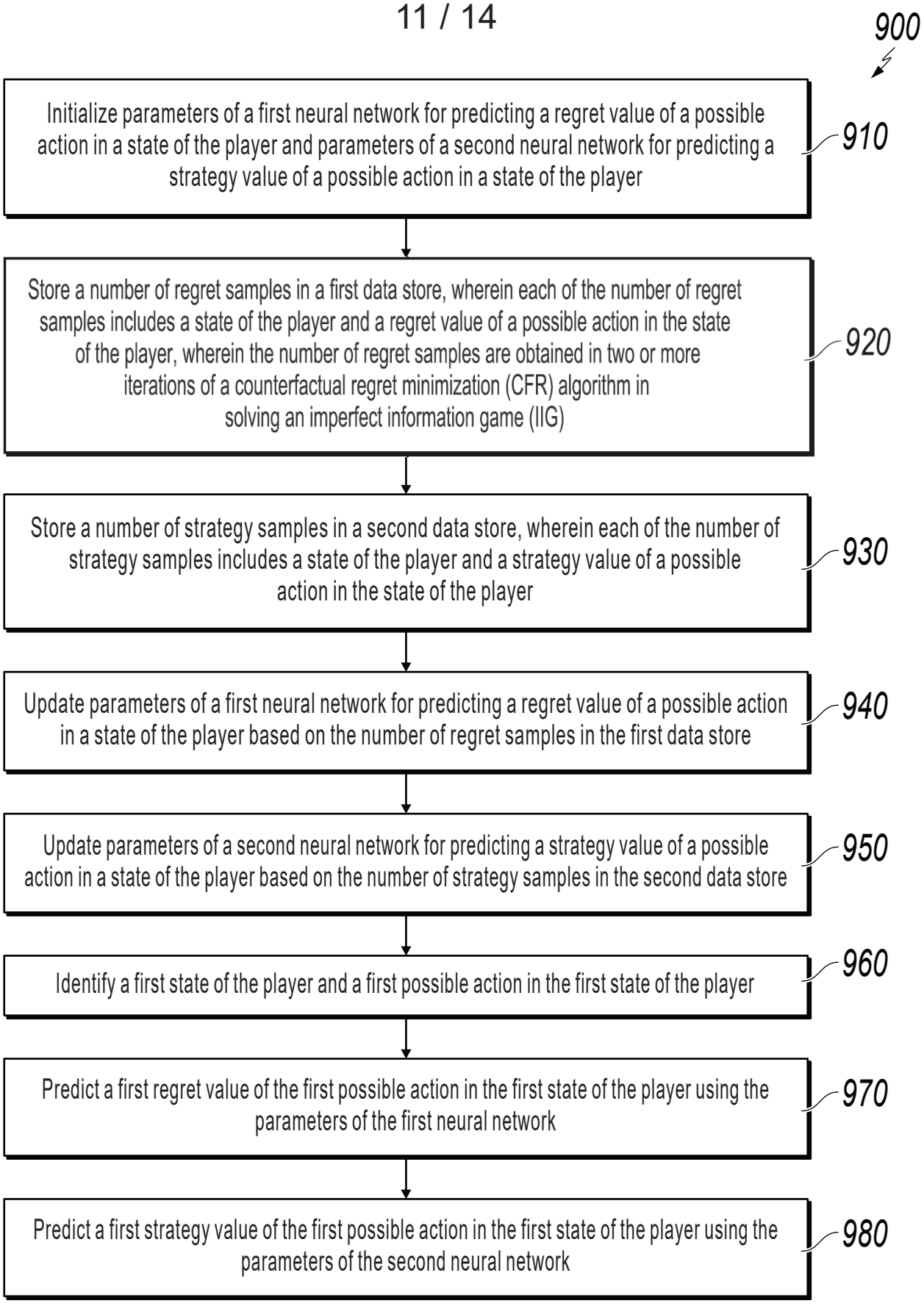
900
Initialize parameters of a first neural network for predicting a regret value of a possible action in a state of the player and parameters of a second neural network for predicting a strategy value of a possible action in a state of the player
910
Store a number of regret samples in a first data store, wherein each of the number of regret samples includes a state of the player and a regret value of a possible action in the state of the player, wherein the number of regret samples are obtained in two or more iterations of a counterfactual regret minimization (CFR) algorithm in solving an imperfect information game (IIG)
920
Store a number of strategy samples in a second data store, wherein each of the number of strategy samples includes a state of the player and a strategy value of a possible action in the state of the player
930
Update parameters of a first neural network for predicting a regret value of a possible action in a state of the player based on the number of regret samples in the first data store
940
Update parameters of a second neural network for predicting a strategy value of a possible action in a state of the player based on the number of strategy samples in the second data store
950
Identify a first state of the player and a first possible action in the first state of the player
960
Predict a first regret value of the first possible action in the first state of the player using the parameters of the first neural network
970
Predict a first strategy value of the first possible action in the first state of the player using the parameters of the second neural network
980

FIG. 9