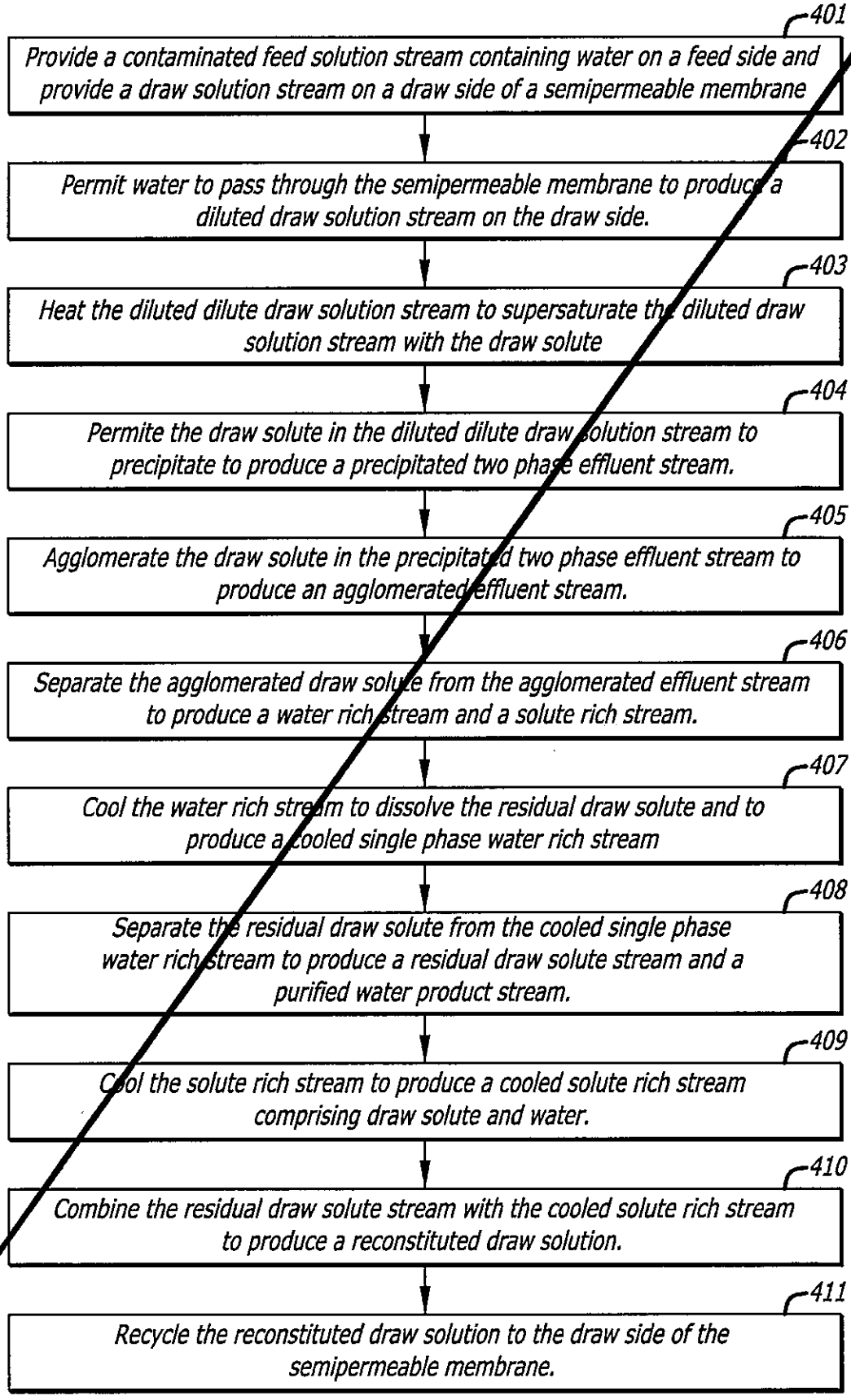
401
Provide a contaminated feed solution stream containing water on a feed side and provide a draw solution stream on a draw side of a semipermeable membrane
402
Permit water to pass through the semipermeable membrane to produce a diluted draw solution stream on the draw side.
403
Heat the diluted dilute draw solution stream to supersaturate the diluted draw solution stream with the draw solute
404
Permite the draw solute in the diluted dilute draw solution stream to precipitate to produce a precipitated two phase effluent stream.
405
Agglomerate the draw solute in the precipitated two phase effluent stream to produce an agglomerated effluent stream.
406
Separate the agglomerated draw solute from the agglomerated effluent stream to produce a water rich stream and a solute rich stream.
407
Cool the water rich stream to dissolve the residual draw solute and to produce a cooled single phase water rich stream
408
Separate the residual draw solute from the cooled single phase water rich stream to produce a residual draw solute stream and a purified water product stream.
409
Cool the solute rich stream to produce a cooled solute rich stream comprising draw solute and water.
410
Combine the residual draw solute stream with the cooled solute rich stream to produce a reconstituted draw solution.
411
Recycle the reconstituted draw solution to the draw side of the semipermeable membrane.

FIG. 4

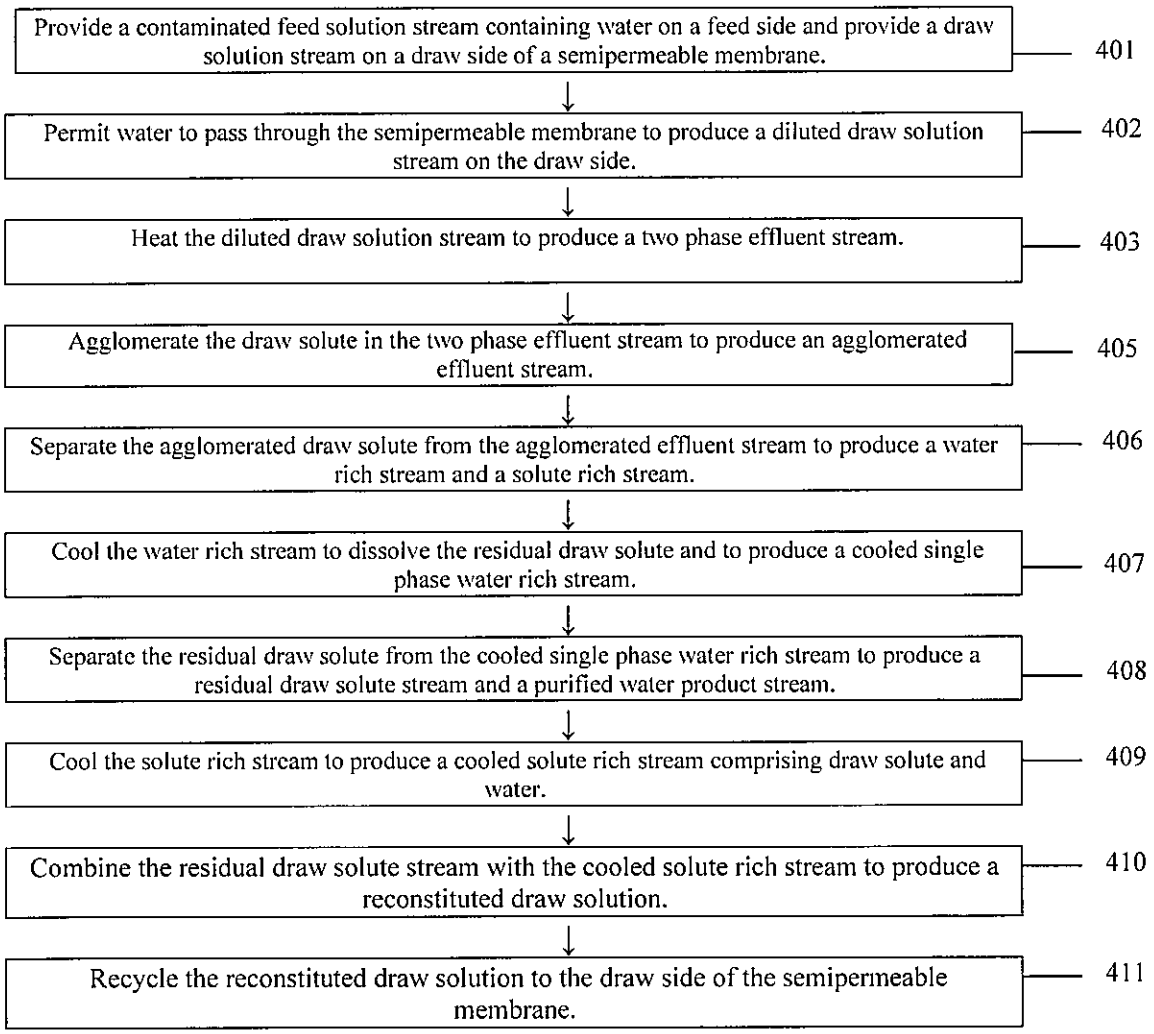
Provide a contaminated feed solution stream containing water on a feed side and provide a draw solution stream on a draw side of a semipermeable membrane.
401
Permit water to pass through the semipermeable membrane to produce a diluted draw solution stream on the draw side.
402
Heat the diluted draw solution stream to produce a two phase effluent stream.
403
Agglomerate the draw solute in the two phase effluent stream to produce an agglomerated effluent stream.
405
Separate the agglomerated draw solute from the agglomerated effluent stream to produce a water rich stream and a solute rich stream.
406
Cool the water rich stream to dissolve the residual draw solute and to produce a cooled single phase water rich stream.
407
Separate the residual draw solute from the cooled single phase water rich stream to produce a residual draw solute stream and a purified water product stream.
408
Cool the solute rich stream to produce a cooled solute rich stream comprising draw solute and water.
409
Combine the residual draw solute stream with the cooled solute rich stream to produce a reconstituted draw solution.
410
Recycle the reconstituted draw solution to the draw side of the semipermeable membrane.
411

FIG. 4