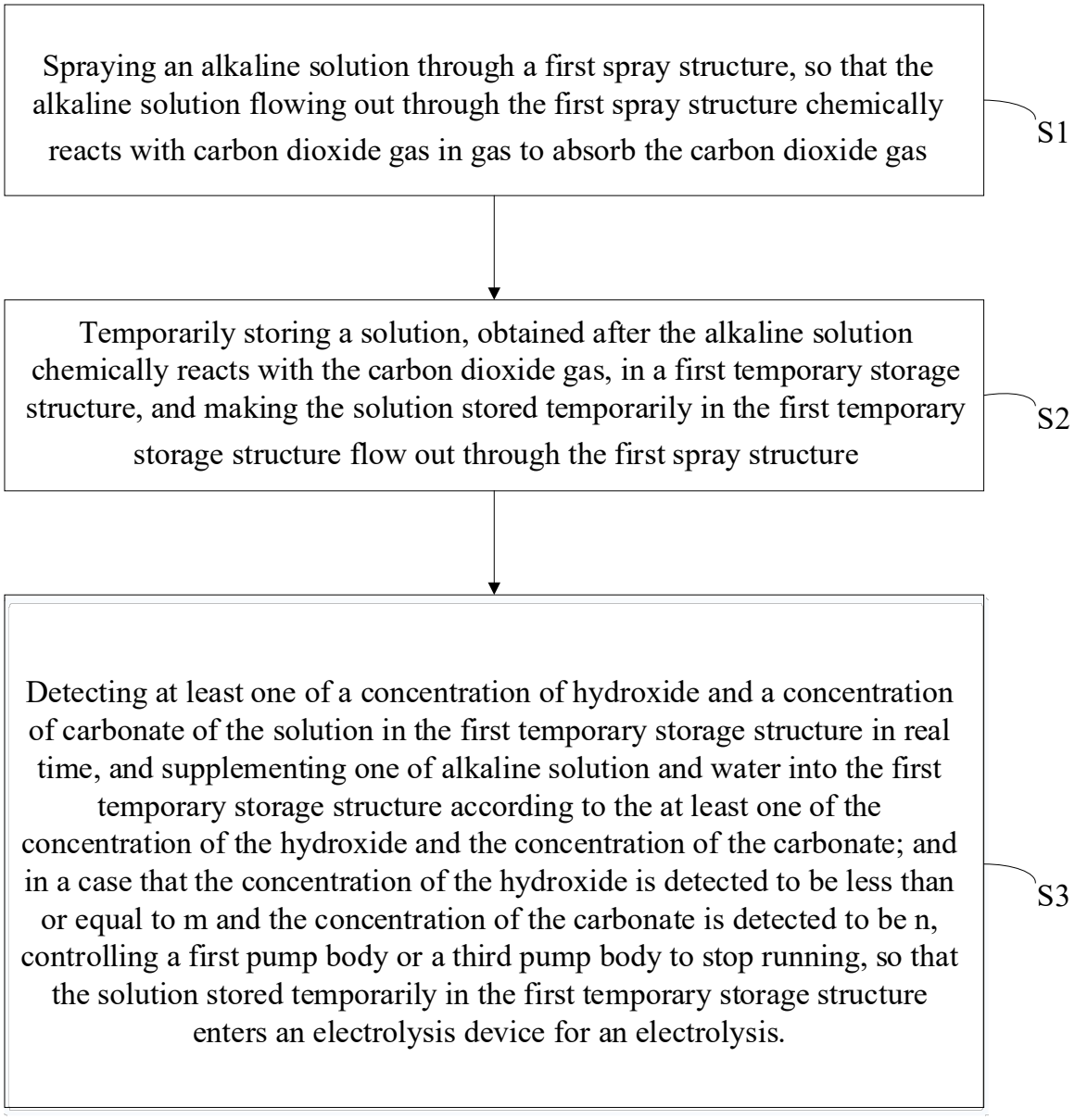

Spraying an alkaline solution through a first spray structure, so that the alkaline solution flowing out through the first spray structure chemically reacts with carbon dioxide gas in gas to absorb the carbon dioxide gas
S1
Temporarily storing a solution, obtained after the alkaline solution chemically reacts with the carbon dioxide gas, in a first temporary storage structure, and making the solution stored temporarily in the first temporary storage structure flow out through the first spray structure
S2
Detecting at least one of a concentration of hydroxide and a concentration of carbonate of the solution in the first temporary storage structure in real time, and supplementing one of alkaline solution and water into the first temporary storage structure according to the at least one of the concentration of the hydroxide and the concentration of the carbonate; and in a case that the concentration of the hydroxide is detected to be less than or equal to m and the concentration of the carbonate is detected to be n, controlling a first pump body or a third pump body to stop running, so that the solution stored temporarily in the first temporary storage structure enters an electrolysis device for an electrolysis.
S3

FIG. 1

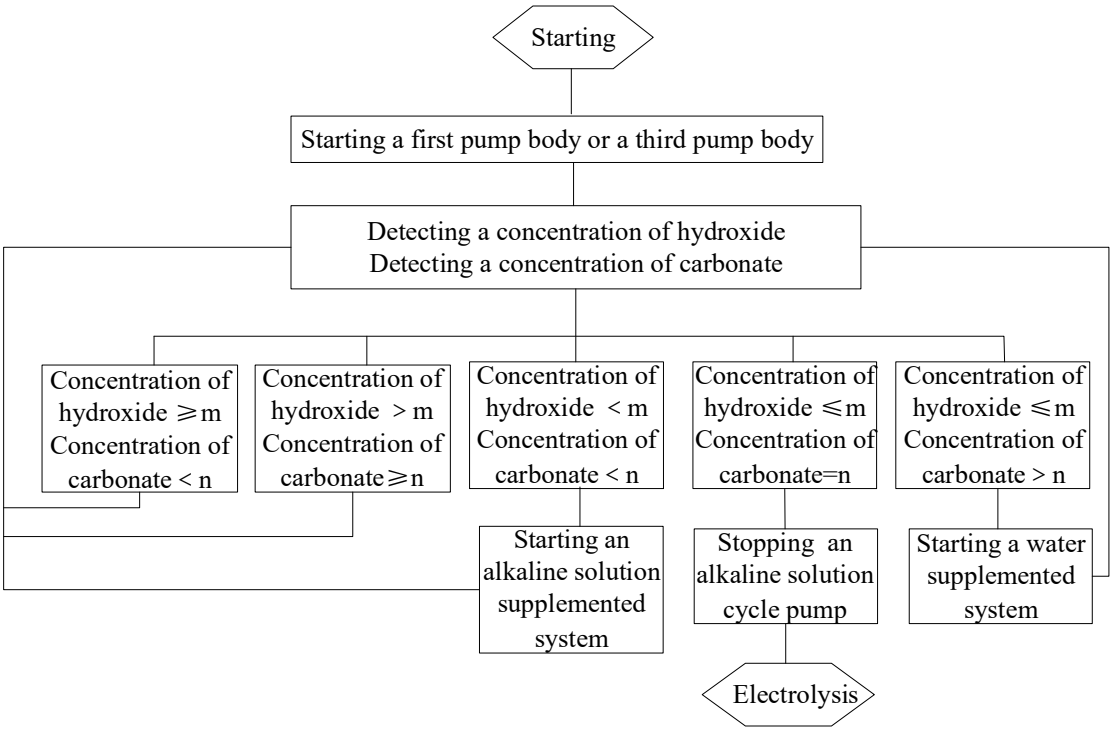

Starting
Starting a first pump body or a third pump body
Detecting a concentration of hydroxide
Detecting a concentration of carbonate
Concentration of hydroxide ⩾m Concentration of carbonate < n
Concentration of hydroxide > m Concentration of carbonate⩾n
Concentration of hydroxide < m Concentration of carbonate < n
Concentration of hydroxide ⩽m Concentration of carbonate=n
Concentration of hydroxide ⩽m Concentration of carbonate > n
Starting an alkaline solution supplemented system
Stopping an alkaline solution cycle pump
Starting a water supplemented system
Electrolysis

FIG. 2

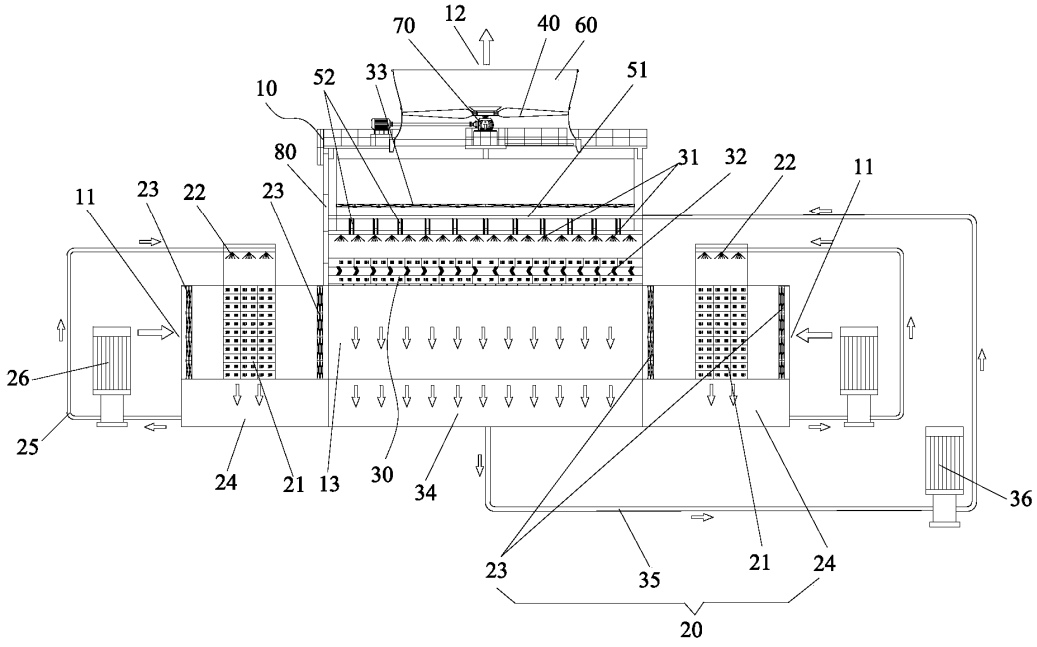

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FIG. 3

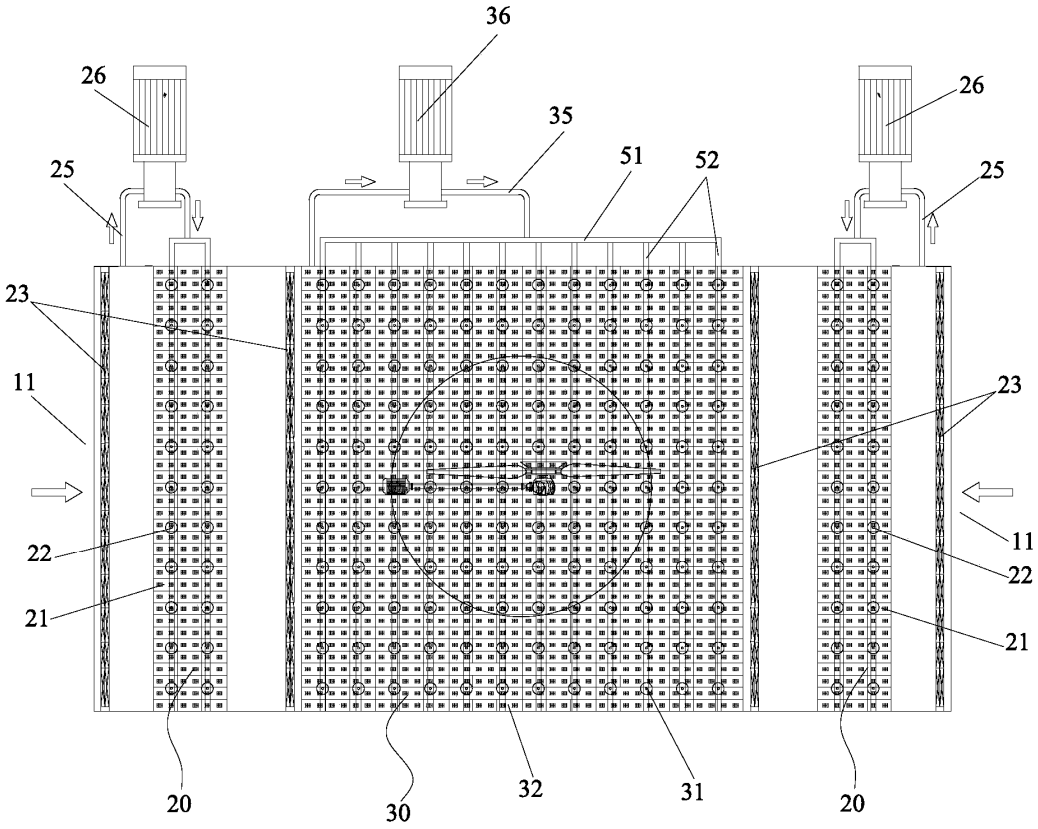


FIG. 4

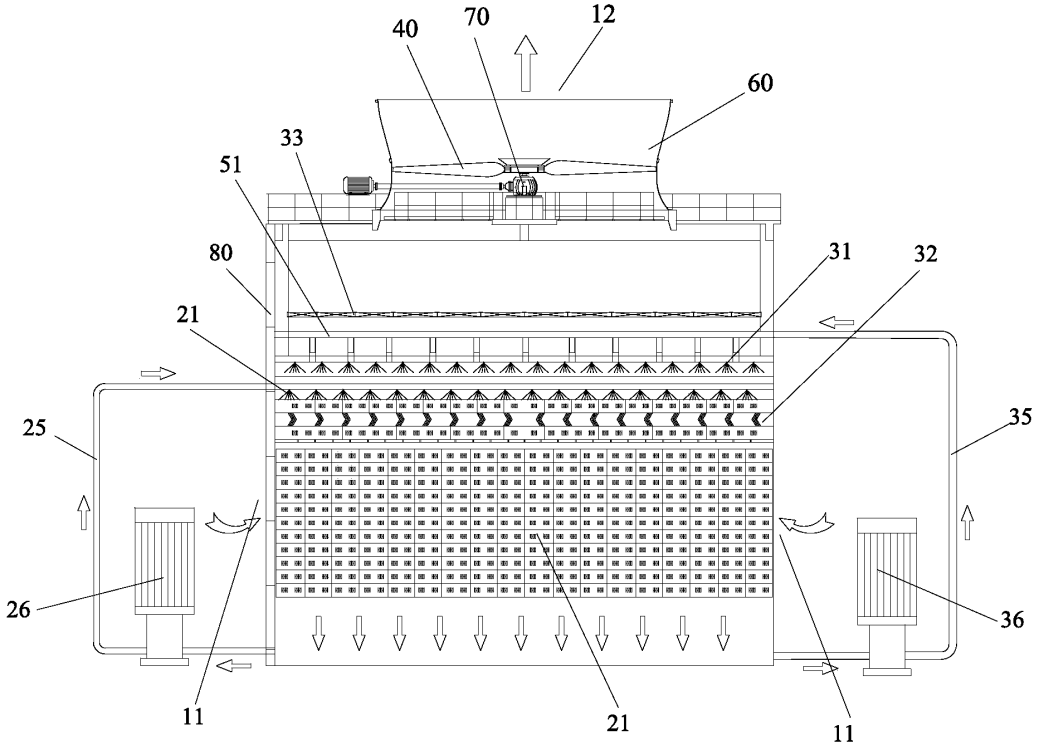


FIG. 5

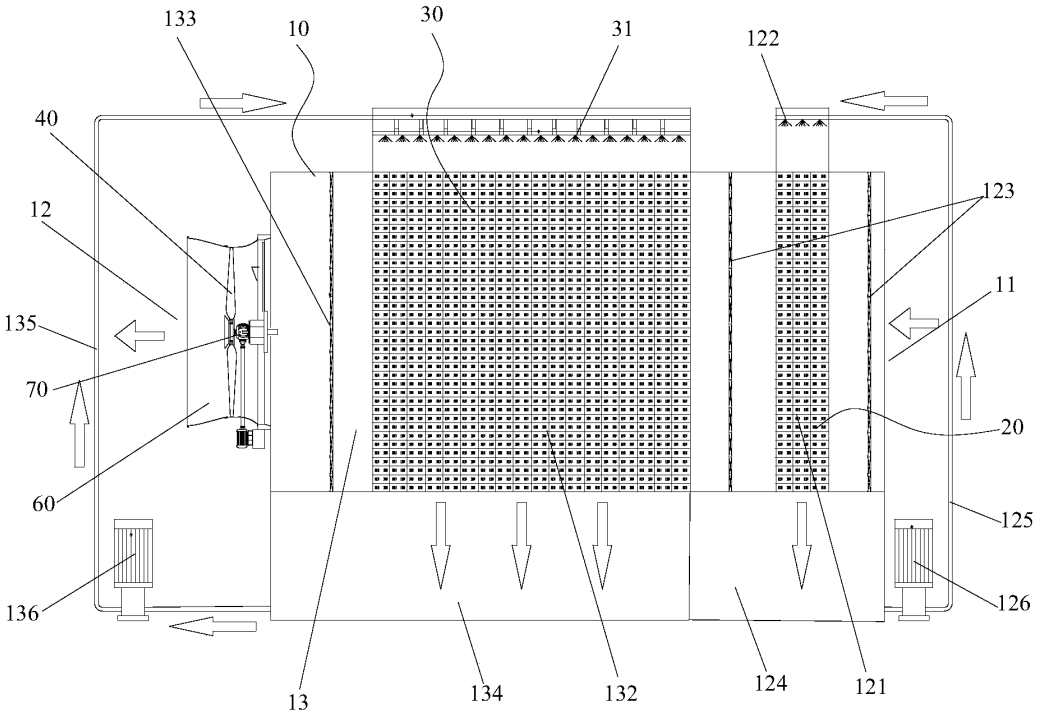

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FIG. 6

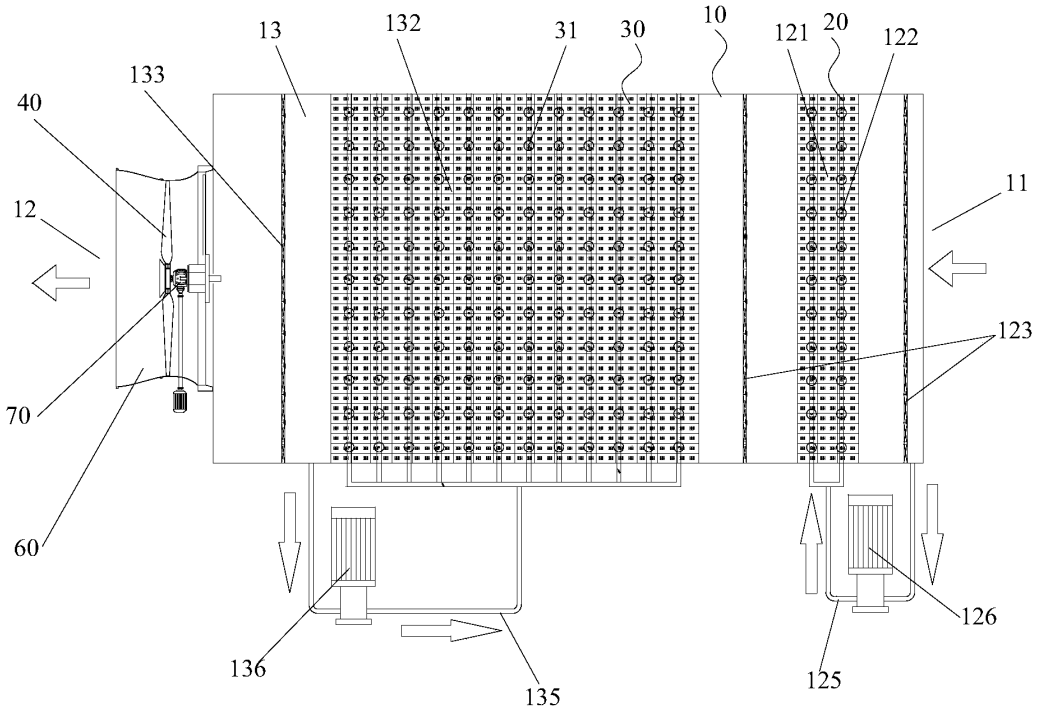


FIG. 7