ABSTRACT

METHOD AND SYSTEM FOR CAPTURING AND UTILIZING CARBON DIOXIDE

Disclosed are a method and system for capturing and utilizing carbon dioxide. The method for capturing and utilizing the carbon dioxide includes: performing a capture process on carbon dioxide in a target component by using an alkaline solution, to obtain an aqueous solution containing a carbonate; performing an electrolytic regeneration process on the aqueous solution containing the carbonate, to obtain an aqueous solution of a hydroxide, carbon dioxide produced by electrolysis, oxygen and hydrogen; and performing a catalytic reaction of the carbon dioxide produced by the electrolysis and the hydrogen, to obtain a hydrocarbon.

Fig. 1