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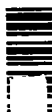
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(54) Title: METHOD FOR HYDROGEN PRODUCTION

(57) Abstract: The present work provides a new route for production of hydrogen via water and preformed carbon materials at a relatively low temperature. The preformed carbon materials comprise carbon nanotubes or nanofibers bonded to a transition metal and are obtained by the catalytic decomposition of hydrocarbons in a reductive atmosphere in the presence of the transition metal catalyst. Experimental results demonstrate that the transition metal bonded to the carbon nanotubes or nanofibers has a high activity for the production of hydrogen at temperatures around 450 °C.