

ABSTRACT

A Process of Controlling the Morphology of Graphite

A process of controlling the morphology of graphite in a process for the production of graphite, the process comprising: contacting at elevated temperature, a metal-containing catalyst with a hydrocarbon gas to catalytically convert at least a portion of the hydrocarbon gas to hydrogen and carbon; wherein the temperature is between 600 °C and 1000 °C and a pressure between 0 bar(g) and 100 bar(g), and wherein both the temperature and the pressure are set within predetermined value ranges to selectively synthesise graphitic material with a desired morphology.

FIGURE 5