

## High Quality Large Scale Single and Multilayer Graphene Production by Chemical Vapor Deposition

### **Disclosure Number**

201102713

### **Technology Summary**

The present invention for making graphene was developed for atmospheric pressure conditions in contrast to conventional methods, which employ a low pressure deposition. Atmospheric deposition conditions constitute a major advantage for synthesis of continuous graphene sheets. Furthermore, current invention allows for high quality graphene synthesis. Also, the present invention offers control over the number of synthesized graphene layers. Moreover, the present invention enables continuous synthesis of graphene sheets, drastically decreasing the cost and production time, paving the way to new, large scale graphene applications such as large displays, photovoltaic cells and other transparent conductor applications. In addition, the invention describes synthesis of graphene on dielectric substrates eliminating costly transfer steps from catalyst to the substrate of interest.

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