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[Continued on next page]

(54) Title: METHOD FOR TREATING SINGLE CRYSTAL CVD DIAMOND AND PRODUCT OBTAINED

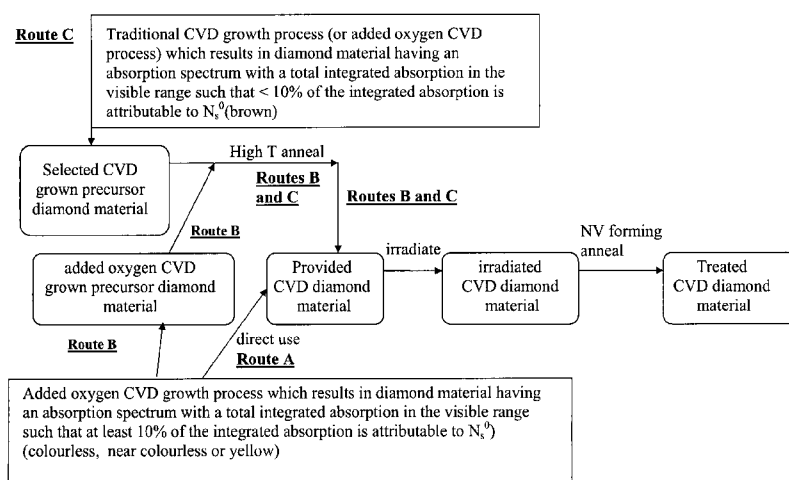


Figure 2

(57) Abstract: A method of introducing NV centres in single crystal CVD diamond material is described. One step of the method comprises irradiating diamond material that contains single substitutional nitrogen to introduce isolated vacancies into the diamond material in a concentration of at least 0.05 ppm and at most 1 ppm. Another step of the method comprises annealing the irradiated diamond to form NV centres from at least some of the single substitutional nitrogen defects and the introduced isolated vacancies. Pink CVD diamond material and CVD diamond material with spintronic properties is also described.



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