

Title (en)
DIAMOND MEDICAL DEVICES

Title (de)
MEDIZINISCHE GERÄTE AUS DIAMANT

Title (fr)
DISPOSITIFS MEDICAUX EN DIAMANT

Publication
EP 1842227 A2 20071010 (EN)

Application
EP 06717944 A 20060111

Priority

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Abstract (en)
[origin: WO2006076354A2] Masked and controlled ion implants, coupled with annealing or etching are used in CVD formed single crystal diamond to create structures for both optical applications, nanoelectromechanical device formation, and medical device formation. Ion implantation is employed to deliver one or more atomic species into and beneath the diamond growth surface in order to form an implanted layer with a peak concentration of atoms at a predetermined depth beneath the diamond growth surface. The composition is heated in a non-oxidizing environment under suitable conditions to cause separation of the diamond proximate the implanted layer. Further ion implants may be used in released structures to straighten or curve them as desired. Boron doping may also be utilized to create conductive diamond structures.

IPC 8 full level
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CPC (source: EP)
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Citation (search report)
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