CARBON-CARBON IMPLANTS



Areas of Application

The carbon-carbon implants are used in medicine for endo- and exo-prostheses

Specification

Density ranges $1.4-1.8~g/cm^3$; mechanical and elastic characteristics are similar to those of the human bones; open porosity of 8-12%; high chemical and radiation inertness; high biocompatibility

Advantages

The carbon-carbon endoprosthesis encases and grows into bone tissue; no restrictions on chemotherapy and radiotherapy due to high chemical and radiation stability of the implants; no allergic reactions to carbon-carbon material; no problems when passing through the metal detectors. The implant materials are transparent for X-rays. All the necessary clinical trials have been passed. More than 150 surgeries in patients have been already done

Stage of Development. Suggestion for Commercialization

IRL8, TRL7 Manufacture, supply, and staff training, upon request

IPR Protection

IPR1, IPR2



Contact Information

Igor V. Gurin, National Science Center "Kharkov Institute of Physics and Technology"; +38 067 712 16 74, +38 057 349 10 61, e-mail: Igor@kipt.kharkov.ua