



Available
Technologies

Bone Implant Material with Enhanced Osseointegration and Improved Life-time through Periodic Structures

Applications:

- Surgical implants
- Orthopaedic implants
- Dental implants

Advantages:

- Micro-scale
- Ultrafast
- One step process
- Used with coatings

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**Summary:***Technology Description*

A laser surface treatment for bone implants to create periodic structured patterns having a defined size. These patterns are applied to the surface of the implant where the bone and implant will be in contact to increase integration and life of the implant. This treatment is a one-step process that can be used on surfaces with topographical changes, including powder-coated and foam implants.

Technology Application

Primarily biomedical:

- Surgical implants (ex. screws)
- Orthopaedic implants
- Dental Implants
- Stents

Other applications of the technology could include improving mechanical, catalytic, and chemical properties of materials.

Stage of Development: Proof of Principle

Patent Status: Patent application in progress

Licensing Status: Available for licensing in specific fields of use