

## Analysis of Patent Protection of Bone Tissue Engineering Scaffold Technology

**Authors :** Yunwei Zhang, Na Li, Yuhong Niu

**Abstract :** Bone tissue engineering scaffold was regarded as an important clinical technology of curing bony defect. The patent protection of bone tissue engineering scaffold had been paid more attention and strengthened all over the world. This study analyzed the future development trends of international technologies in the field of bone tissue engineering scaffold and its patent protection. This study used the methods of data classification and classification indexing to analyze 2718 patents retrieved in the patent database. Results showed that the patents coming from United States had a competitive advantage over other countries in the field of bone tissue engineering scaffold. The number of patent applications by a single company in U.S. was a quarter of that of the world. However, the capability of R&D in China was obviously weaker than global level, patents mainly coming from universities and scientific research institutions. Moreover, it would be predicted that synthetic organic materials as new materials would be gradually replaced by composite materials. The patent technology protections of composite materials would be more strengthened in the future.

**Keywords :** bone tissue engineering, patent analysis, Scaffold material, patent protection

**Conference Title :** ICIPLFP 2019 : International Conference on Intellectual Property Law and Fundamental Principles

**Conference Location :** Helsinki, Finland

**Conference Dates :** July 18-19, 2019