

**TENNESSEE DEPARTMENT OF REVENUE  
LETTER RULING #96-12**

**WARNING**

**Letter rulings are binding on the Department only with respect to the individual taxpayer being addressed in the ruling. This presentation of the ruling in a redacted form is informational only. Rulings are made in response to particular facts presented and are not intended necessarily as statements of Department policy.**

**SUBJECT**

The application of the sales and use tax to the sale and/or use of a medical apparatus which utilizes an electromagnetic field to stimulate bone cell growth.

**SCOPE**

This letter ruling is an interpretation and application of the tax law as it relates to a specific set of existing facts furnished to the department by the taxpayer. The rulings herein are binding upon the department, and are applicable only to the individual taxpayer being addressed.

This letter ruling may be revoked or modified by the commissioner at any time.

Such revocation or modification shall be effective retroactively unless the following conditions are met, in which case the revocation shall be prospective only:

- (A) The taxpayer must not have misstated or omitted material facts involved in the transaction;
- (B) Facts that develop later must not be materially different from the facts upon which the ruling was based;
- (C) The applicable law must not have been changed or amended;
- (D) The ruling must have been issued originally with respect to a prospective or proposed transaction; and
- (E) The taxpayer directly involved must have acted in good faith in relying upon the ruling and a retroactive revocation of the ruling must inure to his detriment.

**FACTS**

The bone growth stimulator is a portable, non-invasive, device which utilizes combined magnetic field technology to stimulate bone growth in non-union fractures, which are fractures that have not healed after nine months. In a non-union fracture the production of bone has either slowed or ceased after nine months from the time of injury. The external stimulation delivered by this apparatus stimulates bone cells at the fracture site to produce insulin-like growth factors. These growth factors are small proteins which have the capability of directly stimulating bone cells to divide and produce collagen, which is the precursor to bone. These events stimulate the production of bone and ultimately the healing of the non-union fracture. In a normal healing situation, the body produces the growth factor without the need for external stimulation. However, in the case of a non-union fracture, the bone cells at the fracture site have slowed or ceased to produce bone. This condition presents a serious health risk if the fracture is in a weight-bearing bone since failure to intervene and correct this situation often results in the amputation of a limb.

This device can only be obtained by prescription from a licensed physician. The physician will fit the stimulator to the patient and explain its use. The patient will then use the device daily for a period of up to nine months until the fracture heals. The bone growth stimulator is dedicated to that patient and at the completion of treatment it is returned to the physician and then the company for disposal. There is no reuse.

The bone growth stimulator is a U.S. Food and Drug Administration approved device which has been designated as a proprietary Class III medical device. Other Class III medical devices include the artificial heart and valves.

Attached and incorporated by reference in the facts of this ruling is a photograph of the bone growth stimulator and information regarding its use.

### **QUESTION**

Whether the sale of a bone growth stimulator is exempt from sales tax under T.C.A. Section 67-6-314(5) as a prosthetic device.

### **RULING**

The sale of a bone growth stimulator is exempt from sales tax under T.C.A. Section 67-6-314(5).

### **ANALYSIS**

T.C.A. Section 67-6-314(5) provides an exemption from the sales tax for “[t]he sale or repair of prosthetics, orthotics, special molded orthopedic shoes, walkers, crutches, surgical supports of all kinds, and other similarly medical corrective or support appliances and devices.” A device is a prosthetic if it replaces a missing body part or augments the performance of a natural function. Cordis Corp. v. Taylor, 762 S.W.2d 138, 139 (Tenn.

1988). Cordis held that an implantable cardiac pacemaker is a prosthesis because it replaces or augments the missing or reduced body function of providing a stimulus for the beating of a heart. *Id.* Cordis also held that a hydrocephalus valve system is a prosthesis because it is an artificial part which augments the natural flow of cerebral spinal fluid from the brain into the bloodstream.

In this case, the bone growth stimulator replaces or augments the missing or reduced body function of healing within a broken bone. It is therefore a prosthetic device exempt from sales and use tax under § 67-6-314(5).

Steven Thomas  
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APPROVED: Ruth E. Johnson

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