

## **Nerve Stump Interface And Axonal Regeneration System For Generating An Electric Field For Promoting and Guiding Axonal Regeneration**

### **ABSTRACT**

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The present invention provides a nerve stump interface for generating an electric field for promoting and guiding axonal regeneration and an electric field assisted axonal regeneration system. The nerve stump interface comprises a sieve having a plurality of holes. A strip is coupled to the sieve. A first electrode is provided at one of the plurality of holes and a second electrode is provided on the strip. The strip is arranged to space the second electrode from the first electrode. The first electrode and the second electrode are for generating the electric field. At least one securing element is provided on a side of the strip to allow that side of the strip to affix against an opposite side of the strip. The present invention also provides a method for assembling the electric field assisted axonal regeneration system.

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Figure 1