SUMMARY

According to one aspect of the invention, there is provided a muscle stimulation system for effecting appendage movement, the muscle stimulation system comprising: first transceiver circuitry; at least one first implantable stimulation device for implantation adjacent to one or more first muscles responsible for the appendage movement, the first implantable stimulation device configured to be wirelessly activated by the first transceiver circuitry; second transceiver circuitry; at least one second implantable stimulation device for implantation adjacent to one or more second muscles responsible for the appendage movement, the second implantable stimulation device configured to be wirelessly activated by the second transceiver circuitry; and a base station configured to wirelessly communicate with both the first transceiver circuitry and the second transceiver circuitry to receive and transmit signals that causes coordinated activation of the first implantable stimulation device and/~~or~~ the second implantable stimulation device to coordinate stimulation of the first muscles and/~~or~~ the second muscles that are responsible for the appendage movement.

BRIEF DESCRIPTION OF THE DRAWINGS

Example embodiments of the invention will be better understood and readily apparent to one of ordinary skill in the art from the following written description, by way of example only, and in conjunction with the drawings. The drawings are not necessarily to scale, emphasis instead generally being placed upon illustrating the principles of the invention, in which:

Figure 1 shows a schematic representation of a muscle stimulation system in accordance to one embodiment of the invention.

Figure 2 shows a muscle stimulation system in accordance to a preferred embodiment of the invention.

Figure 3A shows a top perspective view of an implantable stimulation device for use with the muscle stimulation system of Figure 2. Figures 3B and 3C respectively show top and bottom views of the implantable stimulation device.

DEFINITIONS

The following provides sample, but not exhaustive, definitions for expressions used throughout various embodiments disclosed herein.