Claims

1. A wearable sensor network for tracking a device having a magnet, the wearable sensor network comprising:

at least one flexible element configured to conform to a subject;

magnetic sensors arranged with the at least one flexible element to detect magnetic fields of the magnet as the device is inserted through the subject; and

a plurality of indication elements located in positions corresponding to respective points along the subject;

wherein the detected magnetic fields are processable to determine a position of the magnet to track the device as the device is inserted through the subject;

wherein each indication element is configured to provide an indication when the magnet is within a predetermined range of the corresponding point along the subject.

2. A wearable sensor network according to claim 1, wherein the at least one flexible element comprises alternating parts of different rigidity.

3. A wearable sensor network according to claim 1, wherein the at least one flexible element is bendable to conform to the subject and the wearable sensor network further comprises flex sensors arranged with the at least one flexible element and configured to determine an extent the at least one flexible element bends.

4. A wearable sensor network according to claim 3, wherein the extent the at least one flexible element bends is used to determine positions of the magnetic sensors when the at least one flexible element is bent; and

wherein the position of the magnet is determined using the detected magnetic fields and the positions of the magnetic sensors when the at least one flexible element is bent.

5. A wearable sensor network according to claim 1, wherein the at least one flexible element comprises:

a first portion configured to ensure that the device is inserted into a target part of the subject; and

a second portion configured to ensure that the device is inserted through the subject to a target destination.

6. A wearable sensor network according to claim 1, further comprising FPGA localization electronics configured to process the detected magnetic fields to determine the position of the magnet.

7. A wearable sensor network according to claim 1, wherein the detected magnetic fields are processable to determine an orientation of the magnet.

8. A kit comprising:

a device comprising a magnet; and

a wearable sensor network for tracking the device comprising the magnet, the wearable sensor network comprising:

at least one flexible element configured to conform to a subject;

magnetic sensors arranged with the at least one flexible element to detect magnetic fields of the magnet as the device is inserted through the subject; and

a plurality of indication elements located in positions corresponding to respective points along the subject;

wherein the detected magnetic fields are processable to determine a position of the magnet to track the device as the device is inserted through the subject;

wherein each indication element is configured to provide an indication when the magnet is within a predetermined range of the corresponding point along the subject.

9. A wearable sensor network according to claim 1, wherein the indication elements comprise one or both of bi-coloured LEDs and alarms.