Title: COIL STRUCTURES AND METHODS FOR GENERATING MAGNETIC FIELDS

Abstract: An apparatus for determining a location of a sensor in a surgical navigation domain includes a first magnetic field generator having a first coil set (402-414), a second magnetic field generator having a second coil set (408-428). The first and second coil sets (420-428) are disposed substantially within a common plane. The apparatus further includes a processor configured to receive a plurality of signals and calculates the location of the sensor from the plurality of signals. The sensor produces the plurality of signals in response to magnetic fields generated by the first and second magnetic field generators.