

APPARATUS FOR GENERATING MAGNETIC FIELD, IMAGING DEVICE HAVING THE SAME, AND METHOD FOR IMAGING A SAMPLE

5 ABSTRACT

According to embodiments of the present invention, an apparatus for generating a magnetic field is provided. The apparatus includes a device configured to generate the magnetic field with a corresponding magnetic flux emanating from a first region of the device and returning to
10 a second region of the device, and a magnetically permeable element, wherein the magnetically permeable element is adapted to be arranged to interact with the magnetic field to configure the apparatus in a closed flux configuration to provide a path directing the magnetic flux from the first region of the device towards the second region of the device, and wherein the magnetically permeable element is removable away from the magnetic field to configure the apparatus in an
15 open flux configuration. According to further embodiments of the present invention, an imaging device having the apparatus, and a method for imaging a sample are also provided.

Figure 1A