Lenz's law explains the direction of the current in the coil of wire in Figure 10. In either case–moving the magnet toward or away from the coil–an induced magnetic field opposes the change in the field that created it. A decreasing magnetic field induces a field to oppose the decrease, an increasing magnetic field induces a field to oppose the increaseThe current produced by the induced EMF must be in the direction shown in Figure 10 to produce a magnetic field that opposes the increase in field. The induced field exerts a repelling force on the approaching magnet.