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.