The invention provides a micro strip antenna used for both a
near-field region and a remote-field region. A micro strip
antenna comprises: a first dielectric substrate; a main patch,
having a triangle shape under the first dielectric substrate,
configured to feed a radiation current; a second dielectric
substrate over the first dielectric substrate; and a sub patch,
formed under the second dielectric substrate, configured to
desert a current from the main patch to provide a vertical
magnetic field.