CLAIMS

1. A method for manufacturing an electronic device, comprising:

providing a substrate having a plurality of radio-frequency components provided thereon, the radio-frequency components comprising an antenna and a matching circuitry;

attaching a cap to the substrate over the antenna and the matching circuitry to provide a sealed environment for electronics within to operate; and

performing a molding operation to encapsulate the cap and at least a portion of the substrate with a mold compound.

2. The method of claim 1, further comprising optimising the matching circuitry against a plurality of reference parameters from an unencapsulated antenna before the step of attaching the cap to the substrate.

3. The method of claim 2, wherein the step of optimising the matching circuitry comprises:

manufacturing a plurality of sample electronic devices; and

comparing an antenna performance of successive ones of the sample electronic devices against the reference parameters from the unencapsulated antenna.

4. The method of claim 3, wherein the step of optimising the matching circuitry further comprises:

tuning the successive ones of the sample electronic devices to compensate for differences between the reference parameters from the unencapsulated antenna and the antenna performance of the successive ones of the sample electronic devices.

5. The method of claim 4, wherein the step of optimising the matching circuitry further comprises:

tuning the matching circuitry in accordance with a plurality of matching circuitry values determined when the antenna performance of one of the sample electronic devices matches the reference parameters from the unencapsulated antenna.

6. The method of any one of the preceding claims, wherein the step of attaching the cap to the substrate comprises bonding the cap to the substrate with an adhesive.

7. The method of claim 6, wherein the adhesive comprises a room temperature vulcanizing silicone.

8. The method of any one of the preceding claims, wherein the step of attaching the cap to the substrate comprises aligning a plurality of pins of the cap with corresponding ones of a plurality of holes in the substrate.

9. The method of claim 8, wherein the step of attaching the cap to the substrate further comprises heat staking the cap to the substrate by means of the pins.

10. The method of any one of the preceding claims, further comprising machining the cap from a polycarbonate material.

11. The method of any one of the preceding claims, wherein the step of performing the molding operation comprises:

placing the substrate with the antenna and the matching circuitry sealed by the cap in a mold; and

injecting the mold compound into the mold at an injection pressure of between 1.02 kilograms per square centimetres (kg/cm^2) and 61.2 kg/cm^2.