What is claimed is:

1. A capacitive sensor comprising:

a substrate having a surface;

a touch-sensing pattern of metallic conductive traces disposed upon the surface of the substrate; and

a first passive circuit element comprising a metallic conductor disposed upon the same surface of the substrate.

2. A capacitive sensor according to claim 1, wherein the substrate comprises a visible light transparent substrate.

3. A capacitive sensor according to claim 2, wherein the substrate comprises a transparent polymer.

4. A capacitive sensor according to claim 1, wherein the sensing pattern of metallic conductive traces and the metallic conductor of the first passive circuit element comprise the same material.

5. A capacitive sensor according to claim 1, wherein the thickness of the sensing pattern of metallic conductive traces and the thickness of the metallic conductor of the first passive circuit element are substantially the same.

6. A capacitive sensor according to claim 1, wherein the first passive circuit element comprises a resistor, a capacitor, or an inductor comprising metal traces.

7. A capacitive sensor according to claim 6, wherein the first passive circuit element comprises a resistor that comprises a mesh of metallic traces.

8. A capacitive sensor according to claim 7, wherein the mesh comprises metallic traces having a width of less than about 2 microns.

9. A capacitive sensor according to claim 6, wherein the resistor has a resistance of from about 1 ohm to about 1,000 ohms.

10. A capacitive sensor according to claim 6, wherein the capacitor has a capacitance value of from about 1 picofarad to about 200 picofarads.

11. A capacitive sensor according to claim 6, wherein the inductor has an inductance value from about 0.01 henry to about 1.00 henry.

12. A capacitive sensor according to claim 1, further comprising one or more additional passive circuit elements comprising metallic conductor disposed upon the same surface of the substrate.

13. A capacitive sensor according to claim 12 wherein the one or more additional passive circuit elements form at least a portion of an electronic circuit.

14. A capacitive sensor according to claim 13, wherein the electronic circuit functions as a low-pass filter, a high-pass filter, or a band-pass filter.

15. A capacitive sensor according to claim 4, wherein the low-pass substantially filters out high frequencies above about 100 kHz.

16. A capacitive sensor according to claim 1, wherein the metallic conductive traces, the metallic conductor of the passive circuit element, or both comprise copper, silver, gold, or combinations thereof.

17. A method of making a capacitive sensor comprising:

providing a substrate comprising a metal coating disposed thereon; and

etching the metal to form a touch-sensing pattern of conductive metal traces disposed upon the substrate; and at least one passive circuit element comprising a metallic conductor disposed upon the same surface of the substrate.

18. A method of making a capacitive sensor according to claim 17, further comprising contacting the raised features of an inked stamp to the metal coating before etching the metal coating.

19. A method of making a capacitive sensor according to claim 18 wherein the inked stamp comprises a self-assembled monolayer-forming molecule.

CLAIMS:

1. A capacitive sensor comprising:

a substrate having a surface;

a touch-sensing pattern of metallic conductive traces disposed upon the surface of the substrate; and

a first passive circuit element comprising a metallic conductor disposed upon the same surface of the substrate, wherein the first passive circuit element comprises an inductor comprising a conductive trace substantially following a spiral path.

2. A capacitive sensor according to claim 1, wherein the substrate comprises a visible light transparent substrate.

3. A capacitive sensor according to claim 2, wherein the substrate comprises a transparent polymer.

4. A capacitive sensor according to claim 1, wherein the sensing pattern of metallic conductive traces and the metallic conductor of the first passive circuit element comprise the same material.

5. A capacitive sensor according to claim 1, wherein the thickness of the sensing pattern of metallic conductive traces and the thickness of the metallic conductor of the first passive circuit element are substantially the same.

6. A capacitive sensor according to claim 1, wherein the first passive circuit element further comprises a resistor or a capacitor comprising metal traces.

7. A capacitive sensor according to claim 6, wherein the resistor comprises a mesh of metallic traces.

8. A capacitive sensor according to claim 7, wherein the mesh comprises metallic traces having a width of less than about 2 microns.

9. A capacitive sensor according to claim 6, wherein the resistor has a resistance of from about 1 ohm to about 1,000 ohms.

10. A capacitive sensor according to claim 6, wherein the capacitor has a capacitance value of from about 1 picofarad to about 200 picofarads.

11. A capacitive sensor according to claim 6, wherein the inductor has an inductance value from about 0.01 henry to about 1.00 henry.

12. A capacitive sensor according to claim 1, further comprising one or more additional passive circuit elements comprising metallic conductor disposed upon the same surface of the substrate.

13. A capacitive sensor according to claim 12 wherein the one or more additional passive circuit elements form at least a portion of an electronic circuit.

14. A capacitive sensor according to claim 13, wherein the electronic circuit functions as a low-pass filter, a high-pass filter, or a band-pass filter.

15. A capacitive sensor according to claim 4, wherein the low-pass filter substantially filters out high frequencies above about 100 kHz.

16. A capacitive sensor according to claim 1, wherein the metallic conductive traces, the metallic conductor of the passive circuit element, or both comprise copper, silver, gold, or combinations thereof.

17. A method of making a capacitive sensor comprising:

providing a substrate comprising a metal coating disposed thereon; and

etching the metal to form a touch-sensing pattern of conductive metal traces disposed upon the substrate; and at least one passive circuit element comprising a metallic conductor disposed upon the same surface of the substrate, wherein the first passive circuit element comprises an inductor comprising a conductive trace substantially following a spiral path.

18. A method of making a capacitive sensor according to claim 17, further comprising contacting the raised features of an inked stamp to the metal coating before etching the metal coating.

19. A method of making a capacitive sensor according to claim 18 wherein the inked stamp comprises a self-assembled monolayer-forming molecule.