

[0037] In FIGS. 10*b* and 10*c*, the electrodes 20, 22 are configured as elongated conductive strips arranged in parallel. The first capacitor electrodes 20 extend crosswise to the second capacitor electrodes 22 so as to form a grid-like configuration.

[0038] In FIG. 10*a*, the electrodes are configured as individual discs disposed in rows and columns; to each first capacitor electrode 20 is associated, in facing relationship with respect to the spacer. The first capacitor electrodes are conductively interconnected along the columns and the second capacitor electrodes are conductively interconnected along the rows.

[0039] In FIGS. 10*a* and 10*b*, each line or column is separately connectable to a control circuit. Accordingly, it is possible to detect the position of the user's finger or stylus compressing locally pressure sensor 10 by determining the amount of capacitive coupling between the rows and the columns.

[0040] In FIG. 10*c*, the rows and columns are not separately connectable to a control circuit. Instead, there are three groups of rows and three groups of columns. The electrodes of each group are conductively interconnected. In direction along the columns, a row of the first group is followed by one of the second group, which is, in turn, followed by one of the third group, after which the succession starts again with a row of the first group. Similarly, in direction along the rows, a column of the first group is followed by one of the second group, which is, in turn, followed by one of the third group, after which the succession starts again with a column of the first group. A touchpad as shown in FIG. 10*c* is not capable of detecting (absolute) position of the point of application of a force. Nevertheless, such touchpad can detect movement of the point of application of a force. The direction of the movement perpendicular to the rows can be determined from the succession of the groups of columns, which have increased capacitive coupling to the rows on the other carrier film. Likewise, the direction of the movement perpendicular to the columns can be determined from the succession of the groups of rows, which have increased capacitive coupling to the columns on the other carrier film.

1. A capacitive pressure sensor, comprising a first capacitor electrode and a second capacitor electrode spaced from the first capacitor electrode, said first and second capacitor electrodes being resiliently brought closer together under the action of a compressive force acting on the pressure sensor, wherein said capacitive pressure sensor comprises a laminated arrangement with a first flexible, electrically insulating carrier film carrying said first capacitor electrode, a second flexible, electrically insulating carrier film carrying said second capacitor electrode and a flexible, electrically insulating spacer film sandwiched between said first and second carrier films, said spacer film having a through-hole or recess therein, with respect to which said first and second capacitor electrodes are arranged opposite one another in such a way that said first and second electrodes are brought closer together by resilient bending of said first and/or second carrier film into said through-hole or recess under the action of a compressive force acting on the pressure sensor.

2. The capacitive pressure sensor as claimed in claim 1, wherein said first and or said second carrier film and/or said spacer film comprises one or more layers made of thermoplastic polymer material.

3. The capacitive pressure sensor as claimed in claim 1, wherein said opening or recess is gas-filled.

4. The capacitive pressure sensor as claimed in claim 1, wherein said laminated arrangement has a thickness ranging from 0.1 to 1 mm.

5. The capacitive pressure sensor as claimed in claim 1, comprising an evaluation circuit operatively connected to said first and second capacitor electrodes and configured for determining a quantity indicative of capacitance between said first and second capacitor electrodes.

6. The capacitive pressure sensor as claimed in claim 1, comprising an evaluation circuit operatively connected to said first and second capacitor electrodes and configured for operating in a first mode of operation and a second mode of operation, said evaluation circuit determining, while in said first mode of operation, a quantity indicative of capacitance between said first capacitor electrode and ground and, while in said second mode of operation, a quantity indicative of capacitance between said first and second capacitor electrodes.

7. The capacitive pressure sensor as claimed in claim 1, wherein said flexible spacer film is configured as a double-sided adhesive.

8. The capacitive pressure sensor as claimed in claim 1, wherein at least one of the first and second capacitor electrodes is arranged on the surface of the respective carrier film that faces away from the spacer film.

9. The capacitive pressure sensor as claimed in claim 1, wherein said spacer film has a through-hole therein, wherein said first capacitor electrode is arranged on the surface of the first carrier film that faces the spacer film, wherein said second capacitor electrode is arranged on the surface of the second carrier film that faces the spacer film and wherein at least one of the first and second capacitor electrodes has an electrically insulating layer arranged thereon so as to prevent a short-circuit when said first and second capacitor electrodes are brought closer together.

10. The capacitive pressure sensor as claimed in claim 1, wherein said first carrier film carries a plurality of first capacitor electrodes, each one of said first capacitor electrodes being arranged opposite said second capacitor electrode.

11. The capacitive pressure sensor as claimed in of claim 1, wherein said first carrier film carries a plurality of first capacitor electrodes, wherein said second carrier film carries a plurality of second capacitor electrodes, each one of said second capacitor electrodes being arranged opposite a respective one of said first capacitor electrodes.

12. A method for producing a capacitive pressure sensor as claimed in claim 1, comprising:

applying said first capacitor electrode onto said first flexible carrier film and said second capacitor electrode onto said second flexible carrier film;

providing a flexible spacer film with an opening or recess; and

laminating together said first first flexible carrier film carrying said first capacitor electrode, said spacer film and said second flexible carrier film carrying said second capacitor electrode in such a way that said first and second capacitor electrodes are arranged opposite one another with respect to said opening or recess.