【CLAIMS】

【Claim 1】

A multiple touch module touching a capacitive touch screen, comprising:

a plurality of touch units each including a material which induces a capacitance change of the capacitive touch screen, and disposed in a geometric relation on a design projected on the capacitive touch screen in a predesigned unique geometric relation; and

a touch film including a contact area which comes into contact with the capacitive touch screen, and configured to dispose and fix a certain number of touch units corresponding to the geometric relation on the design on an internal area included on an opposite side of the contact area, or to come into contact with the certain number of touch units corresponding to the geometric relation on the design through the internal area when the multiple touch module touches the capacitive touch screen,

wherein each of the plurality of touch units includes a material configured to be restorable after contraction.

【Claim 2】

The multiple touch module of claim 1, wherein the touch film includes a material capable of transferring capacitive touches of the plurality of touch units to the capacitive touch screen.

【Claim 3】

The multiple touch module of claim 1, wherein the touch film includes a material which blocks the geometric relation formed by the plurality of touch units so as not to be visually exposed.

【Claim 4】

The multiple touch module of claim 1, wherein the plurality of touch units are configured to be disposed and fixed so that at least one touch unit is higher than the other touch units.

【Claim 5】

The multiple touch module of claim 4, wherein the plurality of touch units are configured to touch the capacitive touch screen in a capacitive mode sequentially starting from a highest touch unit.

【Claim 6】

The multiple touch module of claim 1, further comprising a frame unit which applies a capacitance of a human body to the touch units.

【Claim 7】

The multiple touch module of claim 1, wherein the geometric relation on the design includes at least one relation of a distance relation and an angle relation between centers of respective touch units.

【Claim 8】

The multiple touch module of claim 1, wherein the geometric relation on the design includes a geometric relation in which any one specified touch unit of the plurality of touch

units is disposed and fixed on a certain position on the design.

【Claim 9】

The multiple touch module of claim 8, wherein the geometric relation on the design includes at least one relation of a distance relation and an angle relation between a center of the specified touch unit and centers of the remaining touch units.

【Claim 10】

The multiple touch module of claim 8, wherein the geometric relation on the design includes at least one relation of a distance relation and an angle relation between a reference point determined by the specified touch unit and centers of each of the touch units.

【Claim 11】

The multiple touch module of claim 1, further comprising a frame unit which disposes and fixes the plurality of touch units corresponding to the geometric relation on the design,

wherein the touch film is configured to come into contact with the touch units disposed on and fixed to the frame unit through the internal area.

【Claim 12】

The multiple touch module of claim 11, wherein the touch film is configured to come into contact with the touch units disposed on and fixed to the frame unit by a pressure applied in one side direction when the multiple touch module touches the capacitive touch screen.

【Claim 13】

The multiple touch module of claim 11, further comprising a spring which separates the touch units disposed on and fixed to the frame unit from the touch film by a certain distance or more before the multiple touch module touches the capacitive touch screen.

【Claim 14】

The multiple touch module of claim 11, wherein the touch film is configured to be separated from the touch units disposed on and fixed to the frame unit by a certain distance or more before the multiple touch module touches the capacitive touch screen, and is then configured to come into contact with the touch units disposed on and fixed to the frame unit by a pressure applied in one side direction when the multiple touch module touches the capacitive touch screen.

【Claim 15】

The multiple touch module of claim 11, wherein the frame unit is configured to dispose and fix the plurality of touch units so that at least one touch unit of the plurality of touch units is higher than the other touch units.

【Claim 16】

The multiple touch module of claim 15, wherein the touch film is configured to maintain a contact state with a highest touch unit disposed on and fixed to the frame unit.

【Claim 17】

The multiple touch module of claim 1, wherein the touch film disposes and fixes a part of the plurality of touch units corresponding to the geometric relation on the design, and

the multiple touch module further includes a frame unit configured to dispose and fix the remaining touch units of the plurality of touch units corresponding to the geometric relation on the design.

【Claim 18】

The multiple touch module of claim 17, wherein the touch film is configured to come into contact with the remaining touch units disposed on and fixed to the frame unit through the internal area.

【Claim 19】

The multiple touch module of claim 17, wherein the frame unit is configured to come into contact with a part of the touch units disposed on and fixed to the internal area of the touch film.

【Claim 20】

The multiple touch module of claim 17, wherein the frame unit is configured to come into contact with the touch units disposed on and fixed to the internal area of the touch film by a pressure applied in one side direction when the multiple touch module touches the capacitive touch screen.

【Claim 21】

The multiple touch module of claim 17, wherein the touch film is configured to come into contact with the touch units disposed on and fixed to the frame unit by a pressure applied in one side direction when the multiple touch module touches the capacitive touch screen.

【Claim 22】

The multiple touch module of claim 17, further comprising a spring which maintains a state in which the touch units disposed on and fixed to the frame unit are separated from the touch film by a certain distance or more, or maintain a state in which the touch units disposed on and fixed to the internal area of the touch film are separated from the frame unit by a certain distance or more before the multiple touch module touches the capacitive touch screen.

【Claim 23】

The multiple touch module of claim 17, wherein the frame unit is configured to be separated from the touch units disposed on and fixed to the internal area of the touch film by a certain distance or more before the multiple touch module touches the capacitive touch screen, and is then configured to come into contact with the touch units disposed on and fixed to the internal area of the touch film by a pressure applied in one side direction when the multiple touch module touches the capacitive touch screen.

【Claim 24】

The multiple touch module of claim 17, wherein the touch film is configured to be separated from the touch units disposed on and fixed to the frame unit by a certain distance or more before the multiple touch module touches the capacitive touch screen, and is then configured to come into contact with the touch units disposed on and fixed to the frame unit by a pressure applied in one side direction when the multiple touch module touches the capacitive touch screen.

【Claim 25】

The multiple touch module of claim 17, wherein the frame unit is configured to dispose and fix the plurality of touch units so that at least one touch unit of the plurality of touch units is higher than the other touch units.

【Claim 26】

The multiple touch module of claim 25, wherein the touch film is configured to maintain a contact state with a highest touch unit disposed on and fixed to the frame unit.

【Claim 27】

The multiple touch module of claim 17, wherein the touch film is configured to dispose and fix the plurality of touch units so that at least one touch unit of the plurality of touch units is higher than the other touch units.

【Claim 28】

The multiple touch module of claim 27, wherein the frame unit is configured to maintain a contact state with a highest touch unit disposed on or fixed to the internal area of the touch film.

【Claim 29】

The multiple touch module of claim 1, wherein the touch film disposes and fixes the plurality of touch units corresponding to the geometric relation on the design, and the multiple touch module further includes a frame unit configured to come into contact with the

touch units disposed on and fixed to the internal area of the touch film.

【Claim 30】

The multiple touch module of claim 29, wherein the frame unit is configured to come into contact with the touch units disposed on and fixed to the internal area of the touch film by a pressure applied in one side direction when the multiple touch module touches the capacitive touch screen.

【Claim 31】

The multiple touch module of claim 29, further comprising a spring which maintains a state in which the touch units disposed on and fixed to the internal area of the touch film are separated from the frame unit by a certain distance or more before the multiple touch module touches the capacitive touch screen.

【Claim 32】

The multiple touch module of claim 29, wherein the frame unit is configured to be separated from the touch units disposed on and fixed to the internal area of the touch film by a certain distance or more before the multiple touch module touches the capacitive touch screen, and is then configured to come into contact with the touch units disposed on and fixed to the internal area of the touch film by a pressure applied in one side direction when the multiple touch module touches the capacitive touch screen.

【Claim 33】

The multiple touch module of claim 29, wherein the plurality of touch units is

configured to be disposed and fixed so that at least one touch unit of the plurality of touch units is higher than the other touch units.

【Claim 34】

The multiple touch module of claim 33, wherein the frame unit is configured to maintain a contact state with a highest touch unit disposed on and fixed to the internal area.

【Claim 35】

A multiple touch module touching a capacitive touch screen, comprising:

a plurality of touch units each including a material which induces a capacitance change of the capacitive touch screen, and disposed in a geometric relation on a design projected on the capacitive touch screen in a predesigned unique geometric relation;

a touch film including a contact area which comes into contact with the capacitive touch screen, and configured to dispose and fix a part of the plurality of touch units corresponding to the geometric relation on the design on an internal area provided on an opposite side of the contact area; and

a frame unit configured to dispose and fix touch units excluding touch units disposed on and fixed to the internal area of the touch film of the plurality of touch units.

【Claim 36】

The multiple touch module of claim 35, wherein the touch film is configured to come into contact with the touch units disposed on and fixed to the frame unit, and the frame unit is configured to come into contact with the touch units disposed on and fixed to the internal area

of the touch film.

【Claim 37】

A multiple touch module touching a capacitive touch screen, comprising:

a plurality of touch units each including a material which induces a capacitance change of the capacitive touch screen, and disposed in a geometric relation on a design projected on the capacitive touch screen in a predesigned unique geometric relation;

a touch film including a contact area which comes into contact with the capacitive touch screen, and configured to dispose and fix in the geometric relation on the design the plurality of touch units corresponding to the geometric relation on the design on an internal area provided on an opposite side of the contact area; and

a frame unit configured to come into contact with the touch units disposed and fixed to the internal area of the touch film.

【Claim 38】

The multiple touch module of claim 35, or claim 37, wherein the plurality of touch units is configured to be disposed and fixed so that at least one touch unit is higher than the other touch units.