ment, and wherein substantially the entire touch-surface is formed by an electroactive polymer.

**[0016]** A seventh embodiment of the invention is directed to a portable device including the features of the first, second, third, fourth, fifth or sixth embodiment, and wherein said actuator arrangement and said touch-surface and said control arrangement are arranged so as to operatively provide a tactile feedback or an audible feedback to the user as a response to an event detected by the control arrangement.

**[0017]** An eighth embodiment of the invention is directed to a portable device including the features of the seventh embodiment, and wherein said audible feedback comprises voice signal and/or a music signal to the user as a response to an event detected by the control arrangement.

**[0018]** At least one of the problems identified above is also solved according to a ninth embodiment of the invention directed to a method for providing a feedback in a portable device, which device comprises a touch sensitive arrangement comprising; a touch-surface arranged to be operatively actuated and to operatively receive touches from a user of the device, an actuator arrangement arranged to operatively actuate at least a part of said touch-surface, a control arrangement arranged to operatively detect a touch on said touch-surface and to operatively control the actuator to actuate said touch-surface so as to provide a perceivable feedback to the user as a response to a detected touch, wherein said actuator arrangement comprises an electroactive polymer arrangement arranged to be operatively actuated by said control arrangement so as to actuate said touch-surface for providing a perceivable feedback to the user as a response to a detected touch.

**[0019]** In particular, the method comprises the steps of:

**[0020]** detecting a touch on the touch-surface,

**[0021]** actuating the electroactive polymer arrangement comprised by the actuator arrangement so as to provide a perceivable feedback from the touch-surface to the user as a response to a detected touch.

**[0022]** A tenth embodiment of the invention is directed to a method including the features of the ninth embodiment, wherein said electroactive polymer arrangement comprises at least one region of an electroactive polymer, and at least a first electrode arrangement and at least a second electrode arrangement that are arranged to operatively actuate said region of said electroactive polymer and to be operatively controlled by said control arrangement. The method comprises the steps of actuating said first electrode arrangement and said second electrode arrangement of said region so as to provide a perceivable feedback from the touch-surface to the user as a response to a detected touch.

**[0023]** An eleventh embodiment of the invention is directed to a method including the features of the ninth embodiment, wherein said electroactive polymer arrangement comprises at least one region of an electroactive polymer that is formed by said touch-surface. The method comprises the steps of actuating said region so as to provide a perceivable feedback from the touch-surface to the user as a response to a detected touch.

**[0024]** A twelfth embodiment of the invention is directed to a method including the features of the ninth embodiment, and wherein substantially the entire touch-surface surface is formed by an electroactive polymer. The method comprises the steps of: actuating said touch-surface so as to provide a perceivable feedback from the touch-surface to the user as a response to a detected touch.

**[0025]** A thirteenth embodiment of the invention is directed to a method including the features of the ninth, tenth, eleventh or twelfth embodiment, which method comprises the steps of: actuating the actuator arrangement and said touch-surface so as to operatively provide a tactile feedback or an audible feedback to the user as a response to an event detected by the control arrangement.

**[0026]** A fourteenth embodiment of the invention is directed to a method including the features of the ninth, tenth, eleventh, twelfth or thirteenth embodiment, which method comprises the steps of: actuating the actuator arrangement and said touch-surface so as to provide a voice signal and/or a music signal to the user as a response to an event detected by the control arrangement.

**[0027]** A fifteenth embodiment of the invention is directed to a computer program product stored on a computer usable medium, comprising readable program means for causing a portable device to execute, when said program means is loaded in the portable device, comprising a touch-surface arranged to be operatively actuated and to operatively receive touches from a user of the device, an actuator arrangement arranged to operatively actuate at least a part of said touch-surface, a control arrangement arranged to operatively detect a touch on said touch-surface and to operatively control the actuator to actuate said touch-surface so as to provide a perceivable feedback to the user as a response to a detected touch, wherein said actuator arrangement comprises an electroactive polymer arrangement arranged to be operatively actuated by said control arrangement so as to actuate said touch-surface surface for providing a perceivable feedback to the user as a response to a detected touch, the steps of: detecting a touch on the touch-surface, actuating the electroactive polymer arrangement comprised by the actuator arrangement so as to provide a perceivable feedback from the touch-surface to the user as a response to a detected touch.

**[0028]** A sixteenth embodiment of the invention is directed to a computer program element having program recorded thereon, where the program is to make a portable device to execute, when said program means is loaded in the portable device, comprising, a touch-surface arranged to be operatively actuated and to operatively receive touches from a user of the device, an actuator arrangement arranged to operatively actuate at least a part of said touch-surface, a control arrangement arranged to operatively detect a touch on said touch-surface and to operatively control the actuator to actuate said touch-surface so as to provide a perceivable feedback to the user as a response to a detected touch, wherein said actuator arrangement comprises an electroactive polymer arrangement arranged to be operatively actuated by said control arrangement so as to actuate said touch-surface for providing a perceivable feedback to the user as a response to a detected touch, the steps of: detecting a touch on the touch-surface, actuating the electroactive polymer arrangement comprised by the actuator arrangement so as to provide a perceivable feedback from the touch-surface to the user as a response to a detected touch.

**[0029]** Further advantages of the present invention and embodiments thereof will appear from the following detailed description of the invention.

**[0030]** It should be emphasized that the term "comprises/comprising" when used in this specification is taken to specify the presence of stated features, integers, steps or