11. Portable electronic device according to claim **10**, wherein the electroactive polymer and the key sensing mechanism are transparent.

12. Portable electronic device according to claim **11**, further comprising a display below said key sensing mechanism.

13. Portable electronic device according to claim **10**, wherein said solid material layer comprises a number of cavities, each having electroactive polymer and electrodes.

14. Portable electronic device according to claim **13**, wherein the cavities are provided in a structure and the key sensing mechanism is arranged to detect a key press through providing data indicating a position in the structure based on pressure applied by the electroactive polymer of a cavity on an area in the key sensing mechanism.

15. Portable electronic device according to claim **10**, wherein the electroactive polymer is an ionic electroactive polymer.

16. Portable electronic device according to claim **10**, further comprising an elastic shielding layer above said solid material layer and covering said cavity.

17. Portable electronic device according to claim **10**, wherein the electrocactive polymer is surrounded by a gel formed electrolyte.

18. Portable electronic device according to claim **10**, wherein the electrodes are provided opposite each other on the walls of the cavity.

19. Portable electronic device according to claim **10**, further comprising a control unit arranged to receive location detection data from the key sensing mechanism corresponding to a pressing down of the electroactive polymer in a cavity on the key sensing mechanism and providing a voltage to be applied on the electrodes of the electroactive polymer in a cavity based on this pressing down in order to change the shape of the electroactive polymer in question.

20. Portable electronic device according to claim **10**, wherein it is a portable communication device.

21. Portable electronic device according to claim **20**, wherein it is a cellular phone.

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