

[0013] In a second aspect, there is provided a method of operating an article of furniture, the article of furniture comprising a support structure, at least one component displaceably arranged relative to the support structure and a receiver, the method including inputting operating commands into a controller to cause the controller to output operating signals containing operating instructions; and wirelessly receiving the operating signals at the receiver of the article of furniture and converting the operating signals into control signals to effect displacement of the at least one component of the article of furniture relative to the support structure under the control of a user.

[0014] The method may include monitoring the displacement of the at least one component of the article of furniture and ceasing displacement of the component when at least one predetermined condition is breached.

[0015] In a third aspect, there is provided an operating system for operating an article of furniture, the article of furniture comprising a support structure and at least one component displaceably arranged relative to the support structure, the operating system including a proximity responsive interface carried by the article of furniture, the proximity responsive interface having a plurality of gesture responsive components to enable a user, by means of predetermined gestures relative to the gesture responsive components, to control displacement of the at least one component of the article of furniture relative to the support structure;

a signal processing module responsive to the proximity responsive interface, the signal processing module incorporating a memory device in which a preferred setting of the at least one component relative to the support structure is stored, storage and retrieval of the preferred setting being effected by a predetermined manipulation sequence of gestures relative to at least some of the gesture responsive components of the proximity responsive interface; and

wherein the gesture responsive components are responsive to touch and the gesture responsive components are configured to be touched in a predetermined fashion to store the preferred setting.

[0016] In one embodiment, the gestures may be touch gestures and each gesture responsive component may be a touch sensitive component. It will therefore be appreciated that, in this

embodiment, unless the context clearly indicates otherwise, the term “proximity responsive interface” includes a touch responsive interface.

[0017] Each touch sensitive component may comprise a touch sensor, the predetermined manipulation sequence comprising simultaneously touching a number of the touch sensors for a predetermined first period of time to store the preferred setting and touching the same touch sensors for a predetermined second period of time, different from the first period of time, for example, a predetermined second, shorter period of time, to retrieve the preferred setting.

[0018] In another embodiment, each touch sensitive component may comprise a touch sensor, the predetermined manipulation sequence comprising touching at least one of the touch sensors a predetermined first number of times and with a predetermined first cadence to store the preferred setting and touching at least one of the touch sensors a predetermined second number of times, different from the first number of times, and with a predetermined second cadence, different from the first cadence, to retrieve the preferred setting.

[0019] In a further embodiment, each gesture responsive component may be a proximity sensitive component. Each proximity sensitive component may comprise a proximity sensor. The predetermined manipulation sequence may comprise a user swiping his or her hand contactlessly past at least one of the proximity sensors in a first direction to retrieve the preferred setting for that user. Further, the predetermined manipulation sequence may comprise the user swiping his or her hand contactlessly past at least one of the proximity sensors in a second direction to return the article of furniture to its “home” position.

[0020] A plurality of preferred settings may be stored in the memory device of the signal processing module. Different users may be able to access their preferred settings as stored in the memory device by that user swiping his or her hand contactlessly past the at least one proximity sensor in the first direction a predetermined number of times. The predetermined number of times selected may be unique for that user so that only that user’s preferred settings are retrieved when the relevant predetermined manipulation sequence is carried out. Based on the disclosure, it is therefore apparent that the term “gesture” includes making contact with the components as by touching and also interacting with the components without making contact, i.e. contactlessly.

Brief Description of Drawings

[0021] Embodiments of the disclosure are now described by way of example with reference to the accompanying drawings in which:-

[0022] Fig. 1 shows a schematic block diagram of an embodiment of an operating system for operating an article of furniture;

CLAIMS:

1. An operating system for operating an article of furniture, the article of furniture comprising a support structure and at least one component displaceably arranged relative to the support structure, the operating system including a proximity responsive interface carried by the article of furniture, the proximity responsive interface having a plurality of gesture responsive components to enable a user, by means of predetermined gestures relative to the gesture responsive components, to control displacement of the at least one component of the article of furniture relative to the support structure;

a signal processing module responsive to the proximity responsive interface, the signal processing module incorporating a memory device in which a preferred setting of the at least one component relative to the support structure is stored, storage and retrieval of the preferred setting being effected by a predetermined manipulation sequence of gestures relative to at least some of the gesture responsive components of the proximity responsive interface; and

wherein the gesture responsive components are responsive to touch and the gesture responsive components are configured to be touched in a predetermined fashion to store the preferred setting.

2. The system of claim 1 in which the gestures are touch gestures and each gesture responsive component is a touch sensitive component.

3. The system of claim 2 in which each touch sensitive component comprises a touch sensor, the predetermined manipulation sequence comprising simultaneously touching a number of the touch sensors for a predetermined first period of time to store the preferred setting and touching the same touch sensors for a predetermined second period of time, different from the first period of time, to retrieve the preferred setting.

4. The system of claim 2 in which each touch sensitive component comprises a touch sensor, the predetermined manipulation sequence comprising touching at least one of the touch sensors a predetermined first number of times and with a predetermined first cadence to store the preferred setting and touching at least one of the touch sensors a predetermined

second number of times, different from the first number of times, and with a predetermined second cadence, different from the first cadence, to retrieve the preferred setting.

5. The system of claim 1 in which each gesture responsive component is a proximity sensitive component.

6. The system of claim 5 in which each proximity sensitive component is a proximity sensor, the predetermined manipulation sequence comprising a user swiping his or her hand contactlessly past at least one of the proximity sensors in a first direction to retrieve the preferred setting for that user and the user swiping his or her hand contactlessly past at least one of the proximity sensors in a second direction to return the article of furniture to its “home” position.

7. The system of claim 6 in which a plurality of preferred settings are stored in the memory device of the signal processing module, different users being able to access their preferred setting as stored in the memory device by that user swiping his or her hand contactlessly past the at least one proximity sensor in the first direction a predetermined number of times.