

New claims

1. A computer-implemented method for preventing unintentional
5 unlocking of a portable electronic device, the device including a
touch-sensitive display, the method comprising:
detecting a contact with the touch-sensitive display at a first
predefined location corresponding to a single unlock image while
the portable electronic device is in a locked state, wherein the
10 single unlock image is a graphical, interactive user-interface
object with which a user interacts in order to unlock the device
(208, 308);
moving the single unlock image on the touch-sensitive display in
accordance with movement of the contact while continuous
15 contact with the touch screen is maintained; unlocking the
portable electronic device if the moving of the single unlock
image on the touch-sensitive display results in movement of the
single unlock image from the first predefined location to a
predefined unlock region on the touch-sensitive display (214,
20 314); and
maintaining the portable electronic device in the locked state if
the moving of the single unlock image on the touch-sensitive
display does not result in movement of the single unlock image
from the first predefined location to the predefined unlock region
25 on the touch-sensitive display (212, 314).
2. The method of claim 1, wherein the moving comprises movement
along any desired path.
3. The method of claim 1, wherein the moving comprises movement
30 along a predefined channel from the first predefined location to
the predefined unlock region.
4. The method of claim 1, further comprising displaying visual cues
to communicate a direction of movement of the single unlock
image required to unlock the device (204, 304).

5. The method of claim 4, wherein the visual cues comprise text.
6. The method of claim 4, wherein the visual cues comprise an arrow indicating a general direction of movement of the single unlock image required to unlock the device.
- 5 7. A portable electronic device (100, 400, 500, 700), comprising:
a touch-sensitive display (126);
memory (102);
one or more processors (106); and
one or more modules (144, 150, 152) stored in the memory (102)
10 and configured for execution by the one or more processors
(102), the one or more modules (144, 150, 152) including
instructions:
to detect a contact with the touch-sensitive display (126) at a first
predefined location corresponding to a single unlock image (402,
15 502, 702) while the portable electronic device (100, 400, 500,
700) is in a locked state, wherein the single unlock image (402,
502, 702) is a graphical, interactive user-interface object with
which a user interacts in order to unlock the device (100, 400,
500, 700);
20 to move the single unlock image (402, 502, 702) on the touch-
sensitive display (126) in accordance with movement of the
detected contact while continuous contact with the touch-
sensitive display (126) is maintained;
to unlock the portable electronic device (100, 400, 500, 700) if
25 the single unlock image (402, 502, 702) is moved from the first
predefined location on the touch screen to a predefined unlock
region on the touch-sensitive display (126); and
to maintain the portable electronic device (100, 400, 500, 700) in
the locked state if moving the single unlock image (402, 502,
30 702) on the touch-sensitive display (126) does not result in
movement of the single unlock image (402, 502, 702) from the

first predefined location to the predefined unlock region on the touch-sensitive display (126).

- 5 8. The device of claim 7, further comprising instructions to display visual cues (406) to communicate a direction of movement of the single unlock image (402, 502, 702) required to unlock the device (100, 400, 500, 700).
9. The device of claim 8, wherein the visual cues (406) comprise text.
- 10 10. The device of claim 8, wherein said visual cues (406) comprise an arrow indicating a general direction of movement of the single unlock image (402, 502, 702) required to unlock the device (100, 400, 500, 700).
- 15 11. A computer program product for use in conjunction with a portable electronic device (100, 400, 500, 700) comprising a touch-sensitive display (126), the computer program product comprising a computer readable storage medium and a computer program mechanism embedded therein, the computer program mechanism comprising instructions for:
20 detecting a contact with the touch-sensitive display (126) at a first predefined location corresponding to a single unlock image (402, 502, 702) while the portable electronic device (100, 400, 500, 700) is in a locked state, wherein the single unlock image (402, 502, 702) is a graphical, interactive user-interface object with which a user interacts in order to unlock the device (100, 400, 500, 700);
25 moving the single unlock image (402, 502, 702) on the touch-sensitive display (126) in accordance with movement of the contact while continuous contact with the touch screen is maintained;

unlocking the portable electronic device (100, 400, 500, 700) if
the moving the single unlock image on the touch-sensitive display
(126) results in movement of the single unlock image (402, 502,
702) from the first predefined location to a predefined unlock
5 region on the touch-sensitive display (126); and
maintaining the portable electronic device (100, 400, 500, 700)
in the locked state if moving the single unlock image (402, 502,
702) on the touch-sensitive display (126) does not result in
movement of the single unlock image (402, 502, 702) from the
10 first predefined location to the predefined unlock region on the
touch-sensitive display (126).