【CLAIMS】

1. A foldable electronic device comprising:

a first housing part;

a second housing part;

a third housing part;

a first hinge rotatably coupling the first housing part and the second housing part;

a second hinge rotatably coupling the first housing and the third housing part;

at least one sensor;

at least one processor comprising processing circuitry; and

memory comprising one or more storage media storing instructions, when executed by the at least one processor individually or collectively, cause the foldable electronic device to:

using the at least one sensor, identify a folding state of the foldable electronic device, and

based at least in part on the folding state of the foldable electronic device corresponding to an abnormal folded state, display a warning message related to the folding state via at least a portion of the flexible display.

2. The foldable electronic device of claim 1,

wherein the instructions, when executed by the at least one processor individually or collectively, cause the foldable electronic device to, based on an angle between the first housing part and the second housing part while identifying a state in which the third housing part is folded with respect to the first housing part, identify the abnormal folded state.

3. The foldable electronic device of claim 1,

wherein the at least one sensor includes a first sensor and a second sensor, and

wherein the instructions, when executed by the at least one processor individually or collectively, cause the foldable electronic device to:

using the first sensor, obtain a first data related to a first angle, a first distance, or first magnetic field between the first housing part and the second housing part,

using the second sensor, obtain a second data related to a second angle, a second distance, or second magnetic field between the first housing part and the third housing part, and

based at least in part on the first data and the second data, identify the folding state of the foldable electronic device.

4. The foldable electronic device of claim 1,

wherein instructions, when executed by the at least one processor individually or collectively, cause the foldable electronic device to display the warning message related to the folding state when the foldable electronic device is in the abnormal folded state.

5. The foldable electronic device of claim 1,

wherein instructions, when executed by the at least one processor individually or collectively, cause the foldable electronic device to display the warning message related to the folding state based on a determination that the foldable electronic device may be damaged if the third housing part is moved more than a designated angle.

6. The foldable electronic device of claim 1,

wherein instructions, when executed by the at least one processor individually or collectively, cause the foldable electronic device to display the warning message related to the folding state based on a determination that the foldable electronic device may be damaged if the third housing part is further moved.

7. The foldable electronic device of claim 1,

wherein the at least one sensor includes at least one of a proximity sensor, a gyro sensor, a hall sensor or an acceleration sensor.

8. The foldable electronic device of claim 1,

wherein the instructions, when executed by the at least one processor individually or collectively, cause the foldable electronic device to:

while the first housing part and the second housing part are unfolded with respect to each other, identify, via the at least one sensor, a folding movement of the first and third housing parts to the abnormal folded state, and

based on identifying the first and third housing parts being moved to the abnormal folded state, display, via the flexible display, a notification regarding the abnormal folded state of the foldable electronic device.

9. The foldable electronic device of claim 8,

wherein the abnormal folded state is defined within a rotational range of the third housing part being rotated with respect to the first housing part.

10. The foldable electronic device of claim 8,

wherein the folding movement of the first and third housing parts to the abnormal folded state is identified via the at least one sensor while the third housing part is rotated with respect to the first housing part within a rotational range allowed by the second hinge.

11. The foldable electronic device of claim 8,

wherein the abnormal folded state is defined within a rotational range from a first state in which the first and third housing parts are unfolded with respect to each other to a second state in which the first and third housing parts are folded with respect to each other.

12. The foldable electronic device of claim 1,

wherein the at least one sensor includes:

at least one first sensor for identifying a folding movement of the first and third housing parts, and

at least one second sensor for identifying a folding movement of the first and second housing parts,

wherein the instructions, when executed by the at least one processor individually or collectively, cause the foldable electronic device to:

identify an angle between the first housing part and the second housing part via the at least one second sensor,

based on identifying that the angle between the first housing part and the second housing part is within a threshold angle range via the at least one second sensor, identify that the first housing part and the second housing part are folded, and

based on identifying that the angle between the first housing part and the second housing part is out of the threshold angle range via the at least one second sensor, identify that the first housing part and the third housing part are unfolded,

wherein the threshold angle range is a first threshold angle range, and

wherein the instructions, when executed by the at least one processor individually or collectively, cause the foldable electronic device to identify the third housing part at least partially folded with respect to the first housing part by identifying that an angle between the first housing part and the third housing part is within a second threshold angle range via the at least one first sensor.

13. The foldable electronic device of claim 1,

wherein the at least one sensor includes:

at least one first sensor for identifying a folding movement of the first and third housing parts, and

at least one second sensor for identifying a folding movement of the first and second housing parts,

wherein the instructions, when executed by the at least one processor individually or collectively, cause the foldable electronic device to, based on identifying that the first housing part and the second housing part are unfolded via the at least one second sensor, enable identifying whether the third housing part is at least partially folded with respect to the first housing part via the at least one first sensor.

14. The foldable electronic device of claim 1,

wherein the instructions, when executed by the at least one processor individually or collectively, cause the foldable electronic device to, based on identifying that the third housing part is at least partially folded with respect to the first housing part, enable identifying whether the first housing part and the second housing part are unfolded or folded, and

wherein identifying whether the first housing part and the second housing part are unfolded or folded is disabled based on identifying that the third housing part is not at least partially folded with respect to the first housing part.

15. The foldable electronic device of claim 1,

wherein the second housing part is, when the first housing part and the second housing part are folded, rotated in a first rotational direction with respect to the first housing part, and

wherein the third housing part is, when the first housing part and the third housing part are folded, rotated in a second rotational direction opposite to the first rotational direction with respect to the first housing part.