

CLAIMS

1. An electronic device for determining a skin type of an object, the electronic device comprising:

5 a camera configured to capture at least one image comprising a skin portion and a non-skin portion of an object; and

a processor configured to determine at least one color ratio between the skin portion and the non-skin portion from the at least one image, and determine a skin type of the object based on the determined at least one color ratio.

10

2. The electronic device of claim 1, wherein the processor determines at least one skin attribute related to the object, and determines the skin type based on the determined at least one skin attribute and the determined at least one color ratio.

15

3. The electronic device of claim 2, wherein the at least one skin attribute comprises at least one of a disease related to the skin portion, a disease related to the non-skin portion, a skin tanning state of the object, and an amount of oily residue on skin of the object.

20

4. The electronic device of claim 1, wherein the processor determines the at least one color ratio between the skin portion and the non-skin portion according to a plurality of pre-set color elements.

25

5. The electronic device of claim 4, wherein the plurality of pre-set color elements comprise at least two of red, green, blue, hue, saturation, and brightness (value) (RGB_HSV).

6. The electronic device of claim 1, wherein the non-skin portion comprises at least one of a fingernail portion and a conjunctiva portion.

30

7. The electronic device of claim 1, wherein the processor provides recommendation information for managing skin of the object based on the determined skin type.

5 8. The electronic device of claim 7, wherein the processor obtains environment information about an environment around the object, and determines the recommendation information based on the environment information and the determined skin type.

10 9. The electronic device of claim 8, wherein the processor determines the recommendation information based on the environment information, the skin type, and the at least one skin attribute.

15 10. The electronic device of claim 9, wherein the recommendation information comprises at least one of information for avoiding sunburn, information about a sunscreen suitable to the object, and information about a recommended length of time for the object to be exposed to sun.

20 11. A method of determining, by an electronic device, a skin type of an object, the method comprising:
obtaining at least one image comprising a skin portion and a non-skin portion of an object;
determining at least one color ratio between the skin portion and the non-skin portion from the at least one image; and
25 determining a skin type of the object based on the determined at least one skin ratio.

30 12. The method of claim 11, further comprising determining at least one skin attribute related to the object,
wherein, in the determining of the skin type, the skin type is determined based on the determined at least one skin attribute and the determined at least one color ratio.

13. The method of claim 12, wherein the at least one skin attribute comprises at least one of a disease related to the skin portion, a disease related to the non-skin portion, a skin tanning state of the object, and an amount of oily residue on skin of the object.

5

14. The method of claim 11, wherein, in the determining of the at least one color ratio, the at least one color ratio between the skin portion and the non-skin portion is determined according to a plurality of pre-set color elements.

10

15. A computer-readable recording medium having recorded thereon a program which, when executed by a computer, performs the method of claim 11.