ABSTRACT

SYSTEMS AND METHOD FOR SKIN ANALYSIS USING ELECTRONIC DEVICES

We describe a system for calibrating a moisture sensor, that can be pressed into contact with a user's skin at an unknown pressure by a user when taking a moisture sensor reading, where pressure affects the moisture sensor reading, the system comprising: an electronic device comprising: a camera with a variable focus distance, that has a focus distance when taking an image; and a skin characteristic application configured to: facilitate taking a first picture of a test subject at a forceful pressure and recording i) a first focus distance when the first picture was taken and ii) a first moisture sensor reading from the moisture sensor; implement taking a second picture of the test subject at a light pressure and recording i) a second focus distance when the first picture was taken and ii) a second moisture sensor reading from the moisture sensor; calculate a pressure-based moisture adjustment slope; apply the pressure-based moisture adjustment factor to a future moisture sensor reading, taken at a future focus distance, to arrive at an adjusted future moisture sensor reading; and a moisture sensor, configured to: provide moisture sensor readings to the skin characteristic application.

Figure 1