US009652066B2

(12) **United States Patent**
Setlak

(10) **Patent No.: US 9,652,066 B2**
(45) **Date of Patent: May 16, 2017**

(54) **ELECTRONIC DEVICE INCLUDING FINGER BIOMETRIC SENSOR INCLUDING TRANSPARENT CONDUCTIVE BLOCKING AREAS CARRIED BY A TOUCH DISPLAY AND RELATED METHODS**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 70 days.

(21) Appl. No.: **14/606,502**

(22) Filed: **Jan. 27, 2015**

(65) **Prior Publication Data**

US 2016/0216813 A1 Jul. 28, 2016

(51) **Int. Cl.**
G06F 3/041 (2006.01)
G06K 9/00 (2006.01)

(52) **U.S. Cl.**
CPC ***G06F 3/0412*** (2013.01); ***G06K 9/0002*** (2013.01)

(58) **Field of Classification Search**
CPC G06F 3/0412; G06K 9/00033
See application file for complete search history.

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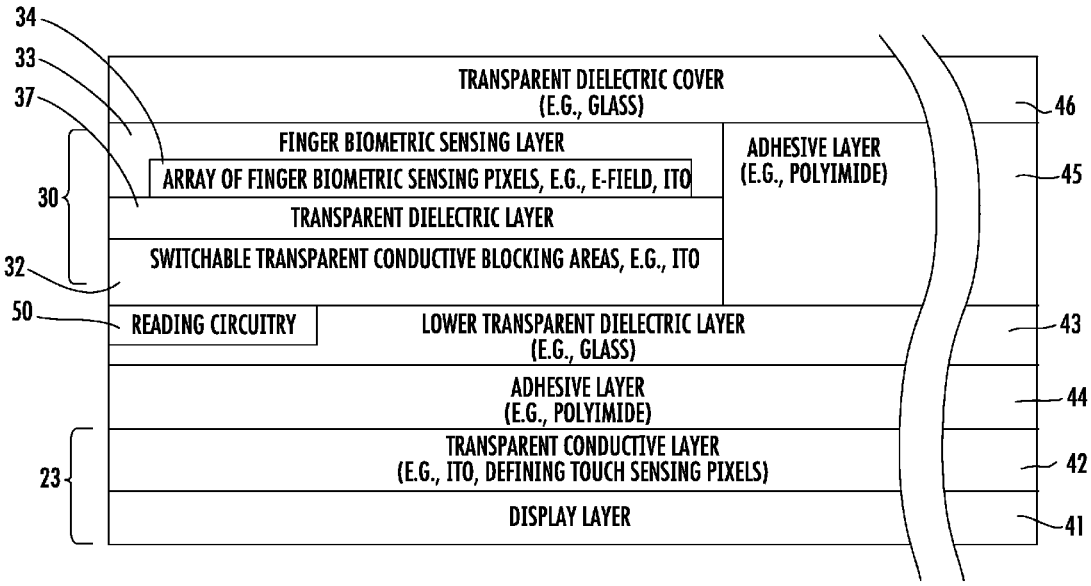
(57) **ABSTRACT**

An electronic device may include a touch display including at least one display layer, and at least one transparent conductive layer thereon defining touch sensing pixels. The electronic device may also include a finger biometric sensor carried by the touch display and that includes a finger biometric sensing layer including an array of transparent conductive finger biometric sensing pixels capacitively coupled to the at least one transparent conductive layer of the touch display. The finger biometric sensor may also include switchable transparent conductive blocking areas between the finger biometric sensing layer and the at least one transparent conductive layer of the touch display and may be selectively switchable between blocking and reading states.

22 Claims, 6 Drawing Sheets