US009634660B2

(12) **United States Patent**
Trend et al.

(10) **Patent No.: US 9,634,660 B2**
(45) **Date of Patent: Apr. 25, 2017**

(54) **TOUCH SENSOR WITH REDUCED ANTI-TOUCH EFFECTS**

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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 306 days.

(21) Appl. No.: **13/330,257**

(22) Filed: **Dec. 20, 2011**

(65) **Prior Publication Data**

US 2013/0155000 A1 Jun. 20, 2013

(51) **Int. Cl.**

G06F 3/041	(2006.01)
H03K 17/96	(2006.01)
G06F 3/044	(2006.01)

(52) **U.S. Cl.**

CPC ***H03K 17/9622*** (2013.01); ***G06F 3/044*** (2013.01); *H03K 2017/9602* (2013.01)

(58) **Field of Classification Search**

CPC G06F 3/041; G06F 2203/04103; G06F 2203/04107; G06F 2203/04111; G06F 3/044; H03K 17/975; H03K 17/9622; H03K 2017/9602

USPC 178/18.01–18.07, 19.01, 19.03; 345/169, 345/173–178

See application file for complete search history.

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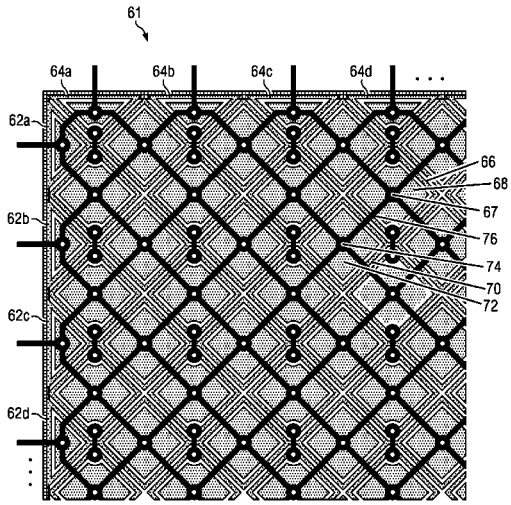
(57) **ABSTRACT**

In an embodiment, a system comprises a touch sensor. The touch sensor comprises an insulating substrate and a plurality of electrodes disposed on the insulating substrate. The plurality of electrodes comprises a drive line having a plurality of drive electrodes and a sense line having a plurality of sense electrodes. At least one of the electrodes comprises a first conductive material having a hole portion substantially free of the first conductive material.

17 Claims, 14 Drawing Sheets