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98024	7590	11/10/2016	EXAMINER	
Patterson & Sheridan, LLP - Synaptics 24 Greenway Plaza Suite 1600 Houston, TX 77046			SHAH, SUJIT	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JOSEPH KURTH REYNOLDS

Appeal 2015-003231
Application 13/436,207
Technology Center 2600

Before KRISTEN L. DROESCH, MATTHEW R. CLEMENTS, and
NATHAN A. ENGELS, *Administrative Patent Judges*.

ENGELS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134(a) from a rejection of claims
1–28. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

ILLUSTRATIVE CLAIM

Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. An input device, comprising:
 - a first substrate having a front surface and a rear surface, wherein the rear surface is on a side of the first substrate opposite to the front surface;
 - a second substrate having a first surface;
 - a plurality of sensor electrodes; and
 - a sensor controller communicatively coupled to the plurality of sensor electrodes, wherein at least a substantial portion of the sensor controller and a portion of the plurality of sensor electrodes are disposed in a volume defined by a region of overlap between the rear surface of the first substrate and the first surface of the second substrate, and wherein the sensor controller is configured to receive resulting signals from the portion of the plurality of sensor electrodes and to transmit a processed signal to a first controller.

THE REJECTIONS

Claims 1–28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Anno (US 2010/0085326 A1; Apr. 8, 2010), in view of Robrecht et al (US 2007/0030254 A1; Feb. 8, 2007), and in further view of various combinations of Crandall et al (US Pub 2012/0293445 A1; Nov. 22, 2012), Saito et al. (US 2009/0315844 A1; Dec. 24, 2009), Hotelling et al. (US 2011/0050585 A1; Mar. 3, 2011), Kurashima (US 2011/0090159 A1; Apr. 21, 2011), and Sakai (US 2009/0213534 A1; Aug. 27, 2009).

ANALYSIS

Each of independent claims 1, 14, and 20 requires a sensor controller wherein at least a substantial portion of the sensor controller is disposed

between a first substrate and a second substrate. Noting that the claims require only “a substantial portion” of the sensor controller to be disposed between a first and second substrate, the Examiner states that the broadest reasonable interpretation of the claim language includes arrangements in which “pins of the sensor controller or the electrodes of the sensor controller are disposed between the two substrates instead of [the] actual body of the sensor controller.” Final Act. 28. Applying that interpretation, the Examiner cites Anno’s disclosures of a flexible printed circuit board (“PCB”) that connects sensor electrodes to a touch control circuit, with a portion of the PCB disposed between a first and second substrate, in combination with Robrecht’s disclosure of a sensor controller mounted “near the periphery” of a touch-panel input device. Final Act. 28–29.

Appellants argue, and we agree, that nothing in the cited combination of references teaches or reasonably suggests a sensor controller arranged with at least a substantial portion of the sensor controller disposed between a first and second substrate. For example, neither Anno nor Robrecht discloses a controller disposed between two substrates, and we do not agree with the Examiner the sensor controller recited in claims 1, 14, and 20 would have been obvious based on the combined teachings of Anno, Robrecht, or the other references of record. Accordingly, we are constrained by the record before us to reverse the Examiner’s rejections of independent claims 1, 14, and 20, as well as dependent claims 2–13, 15–19, and 21–28.

DECISION

We reverse the Examiner’s rejections of claims 1–28.

REVERSED