

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KENICHI KAWASAKI, KAZUNORI TAKAGI, JUN OOSUGI,
HITOSHI NAKADA, and MASAMI TSUCHIDA

Appeal 2007-3652
Application 10/404,653
Technology Center 2600

Decided: March 27, 2008

Before KENNETH W. HAIRSTON, JOSEPH F. RUGGIERO, and ANITA PELLMAN GROSS, *Administrative Patent Judges*.

GROSS, *Administrative Patent Judge*.

DECISION ON APPEAL
STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134 from the Examiner's Final Rejection of claims 1 through 11, which are all of the claims pending in this application. We have jurisdiction under 35 U.S.C. § 6(b).

Appellants' invention relates to a touch screen panel with an electroluminescent panel sharing a substrate with the touch panel portion.

Claims 1 and 5 are illustrative of the claimed invention, and they read as follows:

1. A display portion integrated type touch panel apparatus comprising:

a substrate of glass or resin;

a display portion formed on one surface of the substrate to emit light externally; and

a touch panel portion formed on the other surface of the substrate,

wherein the display portion is formed after formation of the touch panel portion.

5. A method of manufacturing a display portion integrated type touch panel apparatus including a substrate of glass or resin, a touch panel portion formed on one surface of the substrate and a display portion formed on the other surface of the substrate to emit light externally, the method comprising:

a first step of forming the touch panel portion on one surface of the substrate; and

a second step of forming the display portion on the other surface of the substrate,

wherein the display portion is formed after formation of the touch panel portion.

The prior art references of record relied upon by the Examiner in rejecting the appealed claims are:

Thompson	US 5,986,401	Nov. 16, 1999
Siwinski	US 6,814,642 B2	Nov. 09, 2004

Claims 1 through 8 stand rejected under 35 U.S.C. § 103 as being unpatentable over Siwinski.

Claims 9 through 11 stand rejected under 35 U.S.C. § 103 as being unpatentable over Siwinski in view of Thompson.

We refer to the Examiner's Answer (mailed February 1, 2007) and to Appellants' Brief (filed October 31, 2006) for the respective arguments.

SUMMARY OF DECISION

As a consequence of our review, we will affirm the obviousness rejections of claims 1 through 11.

OPINION

With regard to claims 1 through 8, Appellants contend (Br. 8-10) that Siwinski discloses forming the display on the substrate first and then the touch screen or alternatively forming the display after the touch panel but on a different substrate. Further, Appellants contend that Siwinski's statement that the manufacturing process steps may be reordered is limited to the basic teaching in Siwinski that the display be formed prior to the touch panel.

The Examiner asserts (Ans. 4-5) that Siwinski's statement that the order of the steps may be changed suggests the obviousness of forming the touch screen on the substrate prior to forming the display on the substrate. The issue before us, therefore, is whether it would have been obvious in view of Siwinski to form a touch panel portion on a substrate and then form a display portion on the other surface of the substrate.

Claim 1 is directed to an apparatus with a process step recited at the end that the display portion is formed after formation of the touch panel

portion. Thus, claim 1 and its dependents, claims 2 through 4, are product-by-process claims. Product-by-process claims are not limited by the process recited therein unless the process steps produce a different product. *See SmithKline Beecham Corp. v. Apotex Corp.*, 439 F.3d 1312, 1316 (Fed. Cir. 2006).

Siwinski discloses (col. 5, ll. 7-15) a glass or plastic transparent sheet 102 with touch sensitive elements 14 formed on one face and light emitting elements 52 of an electroluminescent display formed on the other face. Thus, Siwinski's touch screen display has the same structure as that recited in claims 1 through 4. We have no evidence before us that forming the display portion after the touch panel portion would change the structure disclosed by Siwinski. Accordingly, we will sustain the obviousness rejection of claims 1 through 4.

Claims 5 through 8 are directed to the method of first forming a touch panel portion on one surface of a substrate and then forming a display portion on the other surface of the substrate. Siwinski discloses (col. 6, l. 48-col. 7, l. 10) forming electroluminescent display elements on transparent sheet 102 followed by forming touch panel elements on the other surface of the sheet 102. Siwinski states (col. 7, ll. 5-8) that the disclosed method "utilizes one sequential manufacturing process, reducing overall time and materials flow problems." Siwinski discloses (col. 7, ll. 11-52) that an alternative method involves first forming touch sensitive elements on transparent sheet 102, then forming electroluminescent elements on substrate 104, and lastly sealing sheet 102 to substrate 104. Siwinski states (col. 7, ll. 50-52) that this method improves overall yield since one defective structure does not require both structures to be discarded.

The alternative method of Siwinski forms the touch panel portion on the substrate first and forms the display portion second. As to Appellants' contention that the display portion is not formed on the same substrate as the touch panel, the display portion is not complete until it is sealed. Thus, the display portion is formed when substrate 104 is sealed to sheet 102. In other words, the display portion is formed on the surface of sheet 102 by sealing substrate 104 to sheet 102.

In addition, Siwinski's statement that forming the display on the substrate and then forming the touch screen elements on the substrate uses one sequential manufacturing process and reduces overall time and materials flow problems suggests forming all the elements directly on sheet 102 to shorten the manufacturing process. Further, Siwinski's statement that certain manufacturing steps may be reordered would have suggested to the skilled artisan that the touch screen elements could be formed on sheet 102 first and then the display elements. Such a method would still provide the benefit of using one sequential manufacturing process thereby reducing overall time and materials flow problems. We note that Appellants contend that the statement that steps may be reordered should be read more narrowly to "utilize the basic teachings disclosed" in Siwinski. However, we find that the basic teachings of Siwinski are merely to form display elements on one side of a substrate and touch panel elements on the other. Therefore, we find that reversing the order of forming the display and the touch screen would have been obvious in view of Siwinski. Accordingly, we will sustain the obviousness rejection of claims 5 through 8 over Siwinski.

Regarding claims 9 through 11, Appellants provide no arguments other than that Thompson fails to cure the deficiencies of Siwinski. Since

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we have found no such deficiencies, we will sustain the obviousness rejection of claims 9 through 11 over Siwinski in view of Thompson.

ORDER

The decision of the Examiner rejecting claims 1 through 11 under 35 U.S.C. § 103 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

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