

**Internal distribution code:**

- (A) [ - ] Publication in OJ  
(B) [ - ] To Chairmen and Members  
(C) [ - ] To Chairmen  
(D) [ X ] No distribution

**Datasheet for the decision  
of 22 September 2016**

**Case Number:** T 0210/13 - 3.5.05

**Application Number:** 08290067.1

**Publication Number:** 2083349

**IPC:** G06F3/048, G06F3/043

**Language of the proceedings:** EN

**Title of invention:**  
Touch-sensitive panel

**Applicant:**  
Elo Touch Solutions, Inc.

**Headword:**  
Touch-sensitive panel/ELO

**Relevant legal provisions:**  
EPC Art. 52(1), 54(2), 56

**Keyword:**  
Novelty - main request (no) - auxiliary request (no)  
Inventive step - auxiliary request (no)

**Decisions cited:**  
T 0681/01, T 1279/04, T 0223/05

**Catchword:**



**Beschwerdekammern**  
**Boards of Appeal**  
**Chambres de recours**

European Patent Office  
D-80298 MUNICH  
GERMANY  
Tel. +49 (0) 89 2399-0  
Fax +49 (0) 89 2399-4465

Case Number: T 0210/13 - 3.5.05

**D E C I S I O N**  
**of Technical Board of Appeal 3.5.05**  
**of 22 September 2016**

**Appellant:** Elo Touch Solutions, Inc.  
(Applicant) 301 Constitution Drive  
Menlo Park, CA 94025 (US)

**Representative:** Grünecker Patent- und Rechtsanwälte  
PartG mbB  
Leopoldstraße 4  
80802 München (DE)

**Decision under appeal:** Decision of the Examining Division of the  
European Patent Office posted on 10 August 2012  
refusing European patent application No.  
08290067.1 pursuant to Article 97(2) EPC.

**Composition of the Board:**

**Chair** A. Ritzka  
**Members:** M. Höhn  
F. Blumer

## **Summary of Facts and Submissions**

- I. This appeal is against the decision of the Examining Division of the European Patent Office posted on 10 August 2012 refusing European patent application No. 08290067.1 pursuant to Article 97(2) EPC on the grounds of lack of novelty and lack of inventive step (Article 52(1) EPC) with regard to prior-art publications:
- D2: WO 2006/094739 A1 and  
D4: WO 2007/118893 A2.
- II. The notice of appeal was received on 12 October 2012. The appeal fee was paid on the same day. The statement setting out the grounds of appeal was received on 20 December 2012. The appellant requested that the appealed decision be set aside and that a patent be granted on the basis of the main request or any of first to fifth auxiliary requests, all filed with the statement setting out the grounds of appeal. Oral proceedings were requested on an auxiliary basis.
- III. By a communication dated 4 July 2016 the board summoned the appellant to oral proceedings on 22 September 2016. In an annex to the summons the board expressed its preliminary opinion that all requests lacked inventive step (Article 56 EPC) with regard to the disclosure of D4.
- IV. By letter dated 22 August 2016 the appellant maintained the main request and submitted six sets of claims according to amended auxiliary requests Ia, Ib and II to V, supported by arguments in favour of an inventive step.

- V. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the main request as filed with the statement setting out the grounds of appeal dated 20 December 2012, or, subsidiarily, on the basis of auxiliary request I as filed with said statement setting out the grounds of appeal or on the basis of any of auxiliary requests Ia, Ib, II, III, IV and V, all as filed with the letter dated 22 August 2016.
- VI. Oral proceedings were held on 22 September 2016. After due consideration of the appellant's arguments the chair announced the decision.

## **Reasons for the Decision**

### 1. Admissibility

The appeal complies with Articles 106 to 108 EPC (see Facts and Submissions, point II above). It is therefore admissible.

### 2. Interpretation of the independent claims

- 2.1 In the statement setting out the grounds of appeal, the appellant argued on the basis of an interpretation of the term "single, one piece, interaction means" (see e.g. claim 1 according to the main request), according to which the interaction means was made out of one piece not having an interface. In the annex to the summons the board questioned this interpretation. A claim has to be clear in itself without further consultation of the description. The formulation is considered to be clear and, according to established

case law (see e.g. T0223/05, Reasons 3.5; T0681/01, Reasons 2.1.1; T1279/04, Reasons 3), the term has to be given its literal meaning.

For a thing to be single and one piece, it has to constitute an entity, but it does not exclude to be built of different materials or comprise a plurality of elements forming this entity.

- 2.2 However, for the purpose of the following analysis the board interprets the claimed interaction means in the way the appellant understands this feature.

Auxiliary request II

3. Claim 1 according to this request reads:

"1. Touch sensitive device comprising:  
a screen (35) with a display panel (37); and  
a touch sensitive panel:  
the touch sensitive panel comprising:  
an interaction means (3) with at least a first and a second interaction area (5, 7),  
at least one transforming means (9, 11) for transforming a mechanical, in particular pressure, excitation of the at least first and/or second interaction area (5, 7) of the interaction means (3) into a respective signal, and  
a processing means (13) configured to identify the position of the excitation based on the signal/signals, wherein the interaction means (3) is a single interaction means, is a glass or plastic plate and is made out of one piece, wherein the interaction means (3) is transparent in the first interaction area (5) and there is no interface between the first interaction area and the second interaction area, and

wherein the touch sensitive panel is arranged such that the first interaction area (5) is over the display panel (37) of the screen (35) thereby forming a touch sensitive display and such that the second interaction area (7) is positioned away from the display panel (37)."

3.1 Thus, according to claim 1 the display 37 is separate from the interaction means 3, and these together form a touch sensitive display. The first interaction area, i.e. the area over the display region, is transparent.

3.2 The board considers D4 to be the closest prior art.

The board agrees that document D4 discloses a

touch sensitive device with a screen and a display panel (PDA 100, fig. 1) and a touch sensitive panel (PDA 100 front surface, fig. 1) comprising:

an interaction means (PDA 100 front surface, fig. 1) with at least a first (Display region 120, fig. 1) and a second interaction area (area 110 of housing 102, fig. 1; p. 8, l. 5-15), at least one transforming means (tap sensors 140, fig. 1) for transforming a mechanical, in particular pressure, excitation of the at least first and/or second interaction area of the interaction means into a respective signal (p. 8, l. 34-41), and a processing means (processor 220, fig. 2) configured to identify the position of the excitation based on the signal/signals (p. 13, l. 4-11), wherein the interaction means is a single interaction means, is a plastic plate and is made out of one piece (see p. 10, l. 7-9, the housing being made of plastic material such as injection molded ABS thermoplastic),

wherein the interaction means is transparent in the first interaction area (see fig. 1, the region of the housing covering the display which must be transparent for the user to see the display) and there is no interface between the first interaction area and the second interaction area (cf. p. 10, l. 7-9, ABS thermoplastic).

3.3 D4 further discloses that the interaction means can be arranged such that the first interaction area is over the display panel of the screen, thereby forming a touch sensitive display (see fig. 1 and p. 9, l. 9-14).

According to D4, the display panel is separate from the surface of the housing. Touch sensors may be integrated into the housing (p. 9, l. 11-14). Since there is a tap sensor 140 placed in the region of the display, and the tap sensors are integrated into the housing in a plane parallel to the top surface not displaced from the top surface (apparent from p. 9, l. 14-16), it can be concluded that there is a part of the housing over the display (see housing that includes the display, p. 9, l. 13-14). All three tap sensors 140 shown in fig. 1 are required for using triangulation (see p. 9, l. 21-25). Tap signals are provided in response to the user's tap "on the outside surface of the housing" (p. 9, l. 10 and 11). User's taps are sensed "over the entire outside surface of the housing" (p. 9, l. 16 and 17). Hence, the surface of the housing extends over the display region. While that part of the housing is considered to be a first interaction area, the region outside the display is considered to correspond to the second interaction area of claim 1 which is positioned away from the display panel.



3.4 In the light of the embodiment of D4 identified above, the subject-matter of claim 1 is considered to lack novelty (Article 54(2) EPC).

3.5 The appellant argued on the basis of different embodiments of D4. The board does not think that the appellant's interpretations of embodiments of D4 are wrong (see e.g. the two different embodiments labelled as D4a and D4b in the statement setting out the grounds of appeal). However, D4 discloses further embodiments, i.e. possible implementations with regard to fig. 1, comprising having the tap sensors 140 integrated into the housing 102, which the board refers to with regard to claim 1 (see point 3.3 above).

Main request and auxiliary requests I, Ia and Ib

4. Since claim 1 of the preceding requests is broader than claim 1 according to auxiliary request II, the preceding requests lack novelty for the same reasons as given for auxiliary request II.

Auxiliary request III

5. Claim 1 according to this request comprises the further feature that the interaction means has a smooth surface without protruding edges. Further, the alternative "plastic" is omitted.

5.1 According to D4, the interaction means in the form of the housing can be in the form of a touch sensitive screen (p. 8, l. 3) and can be operated using, for example, a stylus (p. 8, l. 37). It has been common general knowledge of the skilled person that for operating with a stylus on a touch sensitive screen the surface should preferably be smooth.

Furthermore, D4 discloses that virtual buttons according to the preferred embodiments of the present invention advantageously provide an uninterrupted barrier between the outside of the housing in the inside of the housing at the tap surface. The easiest and most straightforward way of doing this is to make the surface smooth and avoid protrusions and edges.

5.2 D4 discloses that

"Housing 102 is preferably provided in the form of a thin, rigid outer shell made of a plastic material, such as injection molded ABS thermoplastic, that reacts to a user's tap in a desired manner. However, those skilled in the art will appreciate that other materials, such as metal, that react to a user's tap in a desired manner may be used to provide housing 102 in lieu of plastic." (p. 10, l. 6 onwards).

Hence, the skilled person was prompted to use other materials than plastic for the housing. Regarding a touch sensitive display, the skilled person would not have considered using metal, because this is not transparent. However, glass, being transparent, was a well-known material for such displays before the priority date of the present invention and its use is therefore regarded as an obvious alternative.

The added features therefore do not involve an inventive step (Article 56 EPC).

Auxiliary request IV

6. Claim 1 of this request specifies:

"wherein the touch sensitive panel (53) extends only over the area of the screen (35) and is arranged such that the first interaction area (5) is over the display panel (37) of the screen (35) thereby forming a touch sensitive display and such that the second interaction area (7) is aligned with the frame (55) of the screen (35)".

6.1 The appellant essentially argued that the additional features as shown in figure 3b of the present application achieved the effect of making the border area useful for inputs and of downsizing the device by limiting the interaction surface to the size of the screen.

6.2 Regarding the effect of rendering the border of the display useful for input operations, the board notes that this was known from D4, which discloses also to sense taps on the housing 102 and use respective signals for controlling the apparatus.

As far as the alleged effect of limiting the interaction surface is concerned, however, no such technical effect is disclosed in the application documents. Furthermore, the board is not convinced that this effect is actually achieved and hence, does not consider it to be a proper basis for establishing an inventive activity.

6.3 The added feature is therefore not regarded as involving an inventive activity (Article 56 EPC), but as having been within the common general knowledge of the skilled person as an obvious design alternative.

Auxiliary request V

7. Claim 1 according to this request further specifies in comparison to claim 1 according to auxiliary request II:

"an electronic device (39) with a screen (35) with a display panel (37)" and

"wherein the interaction means (3) extends laterally on at least one side over the electronic device (39)".

- 7.1 Since the electronic device is unspecified in claim 1, it can be considered to be everything comprising electronics and a display such as the circuit board underlying the display in the housing according to figure 1 of D4 (see also page 9, lines 17 to 19). The housing 102, which is an interaction means, surrounds the display and circuit board and therefore extends laterally over the electronic device.

- 7.2 Thus, D4 also discloses the additional features of claim 1 according to this request. Its subject-matter is therefore anticipated for the same reasons as given in section 3 above and lacks novelty (Article 54(2) EPC).

8. Thus, none of the requests fulfils the requirements of the EPC.

**Order**

**For these reasons it is decided that:**

The appeal is dismissed.

The Registrar:

The Chair:



K. Götz-Wein

A. Ritzka

Decision electronically authenticated