

## Deckblatt Übersetzung

### Daten der Übersetzung:

Court/Gericht:	Bundesgerichtshof
Date of Decision / Datum der Entscheidung:	2015-08-25
Docket Number / Aktenzeichen:	X ZR 110/13
Name of Decision / Name der Entscheidung:	Unlock Image

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Reference work:       yes  
BGHZ:                   no  
BGHR:                 yes

[Unlock image](#)

EPC Art. 52 para.2 (d), Art. 56; PatG (Patent Act) Sec. 1 para. 3 No. 4, Sec. 4

a) When examining the inventive step, instructions, which relate to the communication of specific contents and therefore aim at affecting the human perception or intellect, are not taken into account as such. Instructions relating to information, which according to the teaching of the invention is to be represented, hence can support the patentability of the invention under the aspect of inventive step only to the extent that it determines or at least affects the solution of a technical problem, using technical means (confirmation by BGH, decision of 26 October 2010 - X ZR 47/07, GRUR 2011, 125 - Wiedergabe topografischer Informationen; decision of 26 February 2015 - X ZR 37/13, GRUR 2015, 660 - Bildstrom).

b) Information-related features of a patent claim must be examined, as to whether the information to be reproduced also constitutes an embodiment of a technical means of solution - which has not already been specified as such in the patent claim. In such case, the technical means of solution must be taken into account when examining the patentability.

BGH (Federal Court of Justice), decision of 25 August 2015 - X ZR 110/13 -  
German Federal Patent Court



# FEDERAL COURT OF JUSTICE

IN THE NAME OF THE PEOPLE

## JUDGMENT

X ZR 110/13

Pronounced on:  
25 August 2015  
Wermes, judicial  
officer, as clerk of  
the court

on the patent nullity matter of

Defendant and Appellant,

versus

Plaintiffs and Appellees,

Civil Senate X. of the Federal Court of Justice following the oral hearing on 25 August 2015, through Presiding Judge Prof. Dr. Meier-Beck, Judges Gröning, Dr. Grabinski, Hoffmann and Dr. Kober-Dehm

has ruled as follows:

Defendant's appeal against the judgment rendered by the 2nd Senate (nullity senate) of the German Federal Patent Court on 04 April 2013 is denied.

Plaintiff 2) shall bear one quarter of the court costs incurred in

the appellate proceedings, and Defendant shall bear three quarters, as well as the extrajudicial costs of Plaintiff 1).

By operation of law

Facts of the Case:

Defendant is the holder of European patent 1 964 022 (patent in suit), claiming US Priority of 23 December 2005 and filed on 30 November 2006 with effect for the Federal Republic of Germany. The patent in suit relates to a computer-implemented method of controlling a portable electronic device and a computer program product. Patent claims 1, 6 and 18 state as follows in the language of the proceedings:

- "1.A computer-implemented method of controlling a portable electronic device (400, 1000) comprising a touch-sensitive display (408, 1014), comprising:  
detecting (308, 908) contact with the touch-sensitive display (408, 1014) while the device is in a user-interface lock state;  
transitioning (314, 914) the device (400, 1000) to a user-interface unlock state if the detected contact corresponds to a predefined gesture;  
and  
maintaining (312, 912) the device (400, 1000) in the user-interface lock state if the detected contact does not correspond to the predefined gesture;  
**characterized by**  
moving an unlock image (402, 1002, 1008) along a predefined displayed path on the touch sensitive display (408, 1014) in accordance with the contact, wherein the unlock image (402, 1002, 1008) is a graphical, interactive user-interface object with which a user interacts in order to unlock the device (400, 1000).
- 6 A portable electronic device (100, 400, 1000), comprising:  
a touch-sensitive display (126, 408, 1014);  
one or more processors (106);  
memory (102);  
and  
one or more programs (132 to 146), wherein the one or more programs (132 to 146) are stored in the memory (102) and configured to be executed by the one or more processors

(106), the programs (132 to 146) including instructions for:  
detecting (308, 908) contact with the touch-sensitive display (126, 408, 1014) while the device (100, 400, 1000) is in a user-interface lock state;  
transitioning (314, 914) the device (100, 400, 1000) to a user-interface unlock state if the detected contact corresponds to a predefined gesture;

and

maintaining (312, 912) the device (100, 400, 1000) in the user-interface lock state if the detected contact does not correspond to the predefined gesture;

**characterized in that**

the programs (132 to 146) further include instructions for moving an unlock image (402, 1002, 1008) along a predefined displayed path on the touch-sensitive display (126, 408, 1014) in accordance with the contact,

wherein the unlock image (402, 1002, 1008) is a graphical, interactive user-interface object with which a user interacts in order to unlock the device (100, 400, 1000).

18. A computer program product with instructions configured for execution by one or more processors (106), which when executed by a portable electronic device (100, 400, 1000) with a touch-sensitive display (126, 408, 1014), cause the device (100, 400, 1000) to perform the method of any of claims 1 to 5."

2. Patent claims 2 through 5 relate directly or indirectly to patent claim 1, patent claims 7 through 17 to patent claim 6.

3. Plaintiffs have asserted that the subject matter of the patent in suit is not patentable, since it does not disclose the invention clearly and completely enough to enable the person skilled in the art to implement it, and the subject matter of the patent in suit goes beyond the contents of the application. Defendant has defended the patent in suit in the main request in the granted version and furthermore with fourteen auxiliary requests to a limited extent.

4. The patent court has declared the patent in suit null and void. Defendant has appealed this, and continues to defend the patent in suit in the granted version as well as with the auxiliary requests filed in the first instance. Plaintiff 1) (hereinafter also: Plaintiff) counters the appeal; Plaintiff 2) has withdrawn the complaint in the instance of appeal.

Grounds for the decision:

5. Defendant's permitted appeal is not successful on the merits.
6. I. The patent in suit relates to the unlocking of a portable electronic device such as mobile telephones with touch screens by way of (finger) movements ("gestures") on the screen.
7. 1. The description states that touch screens are used in many electronic devices to display graphics and text, and to provide a user interface (para. 2). In case of portable devices, however, unintentional activation or deactivation of functions due to unintentional contact with the touch screen is possible. To prevent this, devices may be locked manually or after a predefined idle timelock conditions (para. 3). The device may be unlocked by entering or password or by pressing a predefined set of buttons. International patent application 2004/0011560 (E6) furthermore discloses unlocking a touch screen upon detecting touches on predetermined areas in a given order. However, such unlocking procedures can be burdensome for the user, since he has to recall the predefined set (of buttons) or a password (para. 4).

8.           2. The patent in suit therefore has the object of a more user-friendly procedure for unlocking the touch screen of a portable device. However, the information that it would be desirable to give sensory feedback to the user (para. 5), which the patent court has included in the object, is already part of the solution according to the invention.
  
9.           3. According to patent claim 1, it is a method, which - largely in line with the challenged decision and maintaining the numbering - can be structured as follows:
  1. A computer-implemented method of controlling a portable electronic device, with a touch-sensitive display, comprising:
  2. detecting contact with the touch-sensitive display, while the device is in a user-interface lock state;
  3. transitioning the device to a user-interface unlock state if the detected contact corresponds to a predefined gesture; and

4. maintaining the device in the user-interface lock state if the detected contact does not correspond to the predefined gesture;
- 5.1 moving an unlock image
  - 5.2 along a predefined displayed path on the touch-sensitive display,
  - 5.3 in accordance with the contact,
  - 5.4 wherein the unlock image is a graphical, interactive user-interface object,
  - 5.5 with which a user interacts in order to unlock the device.

10.
  4. The method according to the invention thus is characterised in that the user can unlock the device (the user interface) through a predefined finger movement on the touch-sensitive screen (or using a stylus or other tool), whereas the device remains locked if the movement is not in line with the predefined requirements. The contact movement corresponds to a predefined path, and the unlock image - with the embodiment left by the patent in suit to the person skilled in the art - can be moved along such path in line with the contact - on the screen.

11. The explanations of this teaching as provided by the patent in suit do not show any legal error and have also not been challenged in the appeal.
12. With regard to features 5.4 and 5.5, the patent court has stated that according to the invention, it is only of relevance that the unlock image can be "moved" along a predefined path. However, this already follows from features 5.1 through 5.3, with the effect that features 5.4 and 5.5 do not have any additional relevance; they constitute a "congruence". This is also - correctly - not challenged on the appeal. The interaction between the user interface object (unlock image) and the user as described in features 5.4 and 5.5 is limited to the unlock image through its movement along the predefined path optically indicating the control process by way of a graphical representation, effected by the user by moving his finger on the touch-sensitive screen.
13. II. The patent court has largely substantiated its decision as follows:
14. The subject matter of claim 1 is not based on an inventive step. For the person skilled in the art, who is a development engineer with professional experience in the field of user interfaces, with a tertiary degree in data processing engineering or information technology, features 1 through 4 follow from citation "N1 Quick Start Guide, Version 0.5" (E14). The mobile telephone Neonode N1 described in the above, includes a touch-sensitive screen and knows a "locked state" of the user interface. Unlocking first requires using a "power button". Next, the message "Right sweep to unlock" is shown. If the user does so, thus performing a "predefined gesture" as defined in the patent in suit, the screen is unlocked. If the swipe gesture is not recognized, the associated menu is not displayed, and the relevant action is not performed.
15. The citation does not disclose - as specified in feature group 5 - a

predefined path, which the user could be followed with his finger. There also is no "unlock image", which is also moved in the sense of a graphic interactive user interface object. However, feature group 5 does not have to be considered when examining an inventive step, since it does not contain any instructions, which determine or affect the solution of a technical problem with technical means. The signaling of the unlock process by (also) moving the unlock image according to features 5.1 and 5.3 solely addresses the user. The device as such and its technical function are not affected. Instead, only an information is graphically displayed. The user is given "optical feedback" that the device has detected the start of an unlocking movement and that its further execution is followed. Such a measure is not based on any findings based on technical considerations. That - according to features 5.2, 5.4 and 5.5 - a path is (completely) shown and a graphically interactive user interface object is also moved along the touch screen with the finger, is based solely on the display, which is specially adapted to the user's perception, but also does not unfold any technical effect.

16. III. Ultimately, this holds up to a review in the appeal.

17. 1. However, the patent court does not fully capture the technical means of solution according to the invention, when it denies that feature group 5 as a whole has any relevance for the solution of a technical issue.
18. a) The starting point of the patent court is correct. In order to adequately take into account the patent exclusion according to Art. 52 para. 2 (d), para. 3 EPC, instructions included in the patent claim relating to the delivery of certain content and thus having the objective of impacting on human perception or intellect, are not taken into account, and neither are instructions regard the specific programming of a data processing system (Art. 52 para. 2 (c) EPO). Instructions relating to information, which according to the teaching of the invention is to be represented, hence can support the patentability of the invention under the aspect of inventive step only and only to the extent that it determines or at least affects the solution of a technical problem, using technical means (BGH, decision of 26 October 2010 - X ZR 47/07, GRUR 2011, 125 - Wiedergabe topografischer Informationen; decision of 23 April 2013 - X ZR 27/12, GRUR 2013, 909 margin no. 14 - Fahrzeugnavigationssystem; decision of 26 February 2015 - X ZR 37/13, GRUR 2015, 660, marg. no. 32 et seq. - Bildstrom). However, the criterion that such instructions have to be taken into account *to such extent* as they in any case affect the solution of a technical issue, requires that information-related features of a patent claim must be examined as to whether the information to be reproduced also constitutes an embodiment of a technical means of solution - which has not already been specified as such in the patent claim. In such case, the technical means of solution must be taken into account when examining the patentability. Because it could not be justified that the technical effect of the reproduction of information is not included in the examination of inventive steps, just because in the patent claim, they are

only claimed in the form of reproduction of specific information.

19.           b) This has not been adequately taken into account by the patent court.

20.           With the requirement of moving an unlock image "in accordance with the contact" along a predefined path on the screen (features 5.1 through 5.3), the patent in suit teaches that the control movement for unlocking functions of the device by performing a specific movement on the touch-sensitive display, is optically displayed to the user in that a symbol shown on the screen in turn performs a corresponding (not necessarily identical) movement. The patent claim thus teaches that the user is optically displayed that by his movement, he has issued a command to the computer, which can effect the unlocking and which in fact does so if the user's movement meets the (minimum) requirements of the predefined (finger) movement. In other words, the command constituted by the finger movement is intended to trigger not only the unlocking, but also a display symbolizing the command and the continuation of its implementation. This is a technical solution of the technical problem of optically indicating the unlock process to the user, and thus increasing the operating safety.

21.           However, the instruction to implement this display as a movement of an unlock image along a displayed path on the screen, relates to the content-related arrangement of the information provided by way of graphic means. The movement of the unlock image imitates the user's control movement and therefore clearly depicts initiation and continuation (or discontinuation) of the unlocking thus caused. However, since this solely takes into account human perception, the patent court correctly referred to moving the unlock image and did not attribute any contents to the interactivity addressed in features 5.4 and

5.5., other than that in features 5.1 through 5.3.

22.           2. The above indicates that the substantiation provided by the patent court is not sufficient to consider the subject matter of patent claim 1 as rendered obvious. The mobile telephone Neonode N1 described in citation E14 shows the user, which finger movement he has to make to unlock the phone, but does not show the start and continuation of the execution of the unlocking command. Rather, he is instructed to repeat the finger movement to enter the unlock command if a previous attempt has failed (E14, 11 under 3).
23.           3. However, Plaintiff correctly asserts that the person skilled in the art has been motivated by prior art to add an optical display of the execution of such command to the reproduction of the request to perform the unlock command.
24.           a) The appeal unsuccessfully challenges the patent court's assumption as incorrect, i.e. that the addressed person skilled in the art is a development engineer with professional experience in the field of user interfaces, with a tertiary degree in data processing engineering or information technology. An actual basis for the restriction of the field of activity of the person skilled in the art to mobile devices has not been determined and also has not been submitted in the first or second instance. Moreover, the specialization of a person skilled in the art on portable devices also cannot justify that he does not take note of prior art relating to user interfaces for non-portable devices.
25.           b) The treatise "Touchscreen Toggle Design" by Plaisant and Wallace, submitted as citation E7, describes a video shown at a conference in May 1992, dealing with various virtual switches for turning devices on and off,

which are suitable for a touch-sensitive screen. In the introduction, the authors discuss that such switches can be "very confusing", and that the design freedom available to the programmer has led to "a plethora of unusable switch designs", ignoring the experiences gained in designing conventional control elements. They go on to show potentially suitable switch designs, including a virtual slider switch ("slider toggle") (practically identical with the embodiment of the patent in suit), where the user performs a corresponding movement to "drag" a pointer from one end to the other ("The user can then grab the pointer and slide it to the other side."), thus giving the instruction to turn the device on or off. If the finger is lifted off the screen before the end of the path is reached, the pointer will return to its starting position; it thus moves "in accordance" with the contact.

26. The person skilled in the art follows from this that in case of switching commands entered on a touch-sensitive screen, it is of particular relevance to make it adequately clear to the user, how the "switch" for turning the device on or off, should be operated. On the other hand, E7 shows him that it is expedient to also illustrate the switching process as such and to thus simultaneously acknowledge it graphically, with the effect that the user is shown whether he has correctly entered the control command.

27. Transferring this measure to the process of unlocking the user interface of mobile devices was obvious for the person skilled in the art. Just like switching a device on and off by using a virtual slider switch contributes to operating safety and ease of operation, when the screen shows if the switching command is executed, in case of a mobile telephone, which - like the Neonode N1 - can be unlocked by a certain touch of the display, the operating convenience is enhanced if start and further execution of the unlock

command are optically displayed.

28. The argument used to counter this in the appeal, i.e. that the person skilled in the art would not have used the slider switch of E7, since out of all virtual switches disclosed therein, the representation of a rocket toggle is recommended as the best solution in terms of user acceptance, and not a slider switch, ignores that the starting point of the considerations of the person skilled in the art is the mobile telephone Neonode N1 known from E14, which is unlocked by way of a swipe gesture on the touch-sensitive screen. From this angle, the slider switch is of primary interest compared to all other virtual switches disclosed in E7, since it is only there that a sliding movement corresponding to the swipe gesture is required for turning on or off.
29. 4. The patent court has stated correctly and without being challenged that the ancillary claims do not have to be evaluated differently.
30. IV. The auxiliary requests (reproduced verbatim in the decision of the patent court) also cannot make the appeal a success.
31. 1. As the patent court has stated correctly, auxiliary requests I through III only relate to content and execution of the graphical display, which recognizes execution of the unlock command. They therefore cannot give rise to any inventive step.
32. 2. Auxiliary requests IV through VII specify the movement of the unlock image in that it should start "from a starting point" along a predefined displayed path on the touch-sensitive display and supplement the display on the screen by returning the unlock image to the starting point if the contact is interrupted before the predefined finger movement has been completed. On

the one hand, this again relates to the representation of the information provided to the user and therefore is irrelevant for the inventive step; on the other hand, it provides for the recognition of an already started, but not successfully completed unlock process; as explained, the latter is already taught to the person skilled in the art, by E7 with its reverting pointer.

33.           3. On the one hand, auxiliary requests VIII through XI add that by unlocking the user interface, an application is displayed, which was executed already prior to locking the user interface, and on the other hand provide that instead of a single unlock image and path, two unlock images and paths are predefined, so that together with the decision on the unlock command, the user also selects the application to be displayed after unlocking.

34.           The features of these auxiliary requests also do not give rise to any inventive step. In an application, which was executed prior to locking the user interface, and which should be available again as readily as possible after unlocking, there was the obvious idea that it should be displayed again, once the device has been unlocked. If two applications give rise to the practical requirement that after unlocking the device, only one application is displayed, it is only consequent to provide for two different unlock commands, which after successful unlocking lead to start or renewed display of only one application. It is the very nature of the matter that this requires different swipe gestures if the control command is issued using the touch-sensitive screen, and that such different movements expediently should also be recognized differently.

35.           V. The judgement on the costs is based on Sec. 121 para. 2 PatG (Patent Act), Sec. 91 para. 1, Sec. 92 para. 1, Sec. 269 para. 3 sentence 2

ZPO (German Code of Civil Procedure).

Meier-Beck

Gröning

Grabinski

Hoffmann

Kober-Dehm

Lower court:

German Federal Patent Court, decision of 04 April 2013 - 2 Ni 59/11 (EP) in  
conjunction with 2 Ni 64/11  
(EP) -