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Re: Translation of document: "DE10314554A1"

I, the undersigned Dagmar Grimm, hereby swear that I have translated the attached documents from the German language, that I am familiar with both the German and the English languages, that I am competent in the translation of official documents, and that this is a true and correct translation to the best of my knowledge and ability.



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Executive Translator



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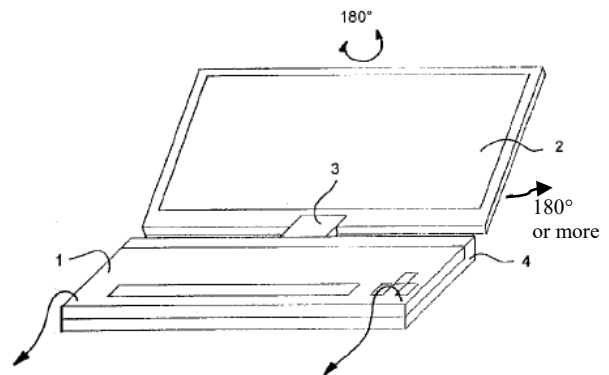
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The following statements have been obtained from the documents submitted by the applicant

(54) Description: **Multivalent notebook**

(57) Abstract: The invention relates to a multifunctional notebook with a basic body 4 having a detachable keyboard 1 and a hinged main screen 2, which is used to cover the basic body 4 with the keyboard 1, a central joint 3 between the basic body and the main screen 2, wherein the central joint 3 allows for horizontally rotating the main screen 2 by 180° and vertically folding the main screen 2 by at least 180 degrees, a second screen 5 located under the detachable keyboard 1 in the basic body 4, and a control device for rotating the image of the main screen 2 by 180°.



[0001] The invention relates to a notebook which is suitable for both conventional and further applications.

[0002] The function of conventional notebooks with a hinged screen as a cover is well known and will therefore not be explained in detail. Also known are notebooks with a hinged screen that can be opened and rotated around a central joint to convert a conventional notebook into a so-called tablet-PC. The function of this tablet-PC is shown in **Fig. 4**.

[0003] If a consultation or sales discussion is conducted at the customer's premises, the spatial conditions are often not suitable for an optimal presentation, i.e., modern presentation equipment, such as overhead projectors with LC-displays or video projectors, cannot be used. For example, if insurance agents or financial service providers visit their customers in their homes, it is not possible to set up a projection screen. Most customers reject such spatial changes. It is therefore customary to use a laptop computer, which creates problems to the effect that the salesperson and the customer have to look together at a relatively small screen.

[0004] It has been shown that the presentation with a computer offers a number of advantages. For example, by means of special software, different options of a life insurance can be calculated and immediately displayed graphically, i.e., they can be demonstrated in an easily understandable and therefore convincing manner. This presentation technology is constantly improved and welcomed by the customer as a very convenient tool. Therefore, there is a growing need to use this technology also for small on-site presentations, i.e., in the home of a customer or in a small office.

[0005] Because of their high processing power, modern small computers, such as notebooks, offer the possibility of processing even program and memory-intensive, highly demanding presentation software. Thus, it would be possible to perform a convincing presentation even at a customer's site, if the above-mentioned problem of space restrictions could be solved.

[0006] For this purpose, EP 00 974 270 proposed a presentation device in the form of a laptop computer with a detachable keyboard, wherein the keyboard is connected to the laptop computer via a wireless connection and a hinged main screen with joints is attached to the basic body of the laptop computer so that it can be rotated, wherein a second screen is provided in the basic body below the detachable keyboard, the joints have a pivoting radius of at least 220 degrees, and a control device is provided which rotates the image on the main screen by 180 degrees. This rotation is carried out when the customer is shown the presentation, with the customer sitting opposite the salesperson. This presentation device is suitable to be used as a conventional notebook and as a presentation device.

[0007] However, the user would like to have additional functions so that he can use the notebook in multivalent fashion without having to purchase a second device.

[0008] Therefore, it is the objective of the invention to provide a notebook with advanced application possibilities.

[0009] This problem is solved with a notebook according to Claim 1. The notebook has a vertically pivoting main screen, which rests on the basic body of the laptop computer when folded. Furthermore, the notebook has a central joint for horizontally rotating the screen. When the main

screen is opened, the main screen can be rotated horizontally by 180 degrees and rotated back so that the back of the screen rests on the keyboard and covers it.

[0010] The notebook also has a detachable keyboard. Below the keyboard, another screen is located in the notebook's basic body. Furthermore, the central joint is designed in such a way that the main screen can be rotated at least 180 degrees in vertical direction.

[0011] When a presentation is to be shown to a person, the main screen is tilted by at least 180 degrees so that the main screen is parallel to the table and parallel to the body. Already in this position the second person can see the main screen. If the screen is panned further, a roof-like arrangement is created. A control device rotates the image of the main screen by 180 degrees. It is clear that the second person is sitting opposite the first person.

[0012] The operator, for example, the salesperson, controls the presentation using the keyboard, mouse or other input devices and follows the progress of the presentation on the second screen embedded in the basic body of the notebook. Switching on the second screen and flipping the main screen can be done either by using a switch or manually via keyboard input. However, it is useful to turn on and rotate the image automatically, for example, by placing a pivot angle detection device in the joint, which causes the image of the main screen to be rotated at a predetermined pivot angle of the main screen.

[0013] As a result, the invention, provides a multivalent notebook which combines the functions of a conventional notebook, a tablet PC and a presentation device with two screens.

[0014] According to Claim 2, at least the second screen is an OLED display. OLED displays are particularly thin and light and therefore particularly suitable for this application.

[0015] An embodiment of the invention is explained by means of the attached schematic drawings.

[0016] Fig. 1 shows a perspective lateral view of the invention in a conventional application as notebook.

[0017] Fig. 2 shows a perspective lateral view of the invention when used as presentation device with two screens.

[0018] Fig. 3 shows a perspective lateral view of the invention as tablet PC.

[0019] Fig. 4 shows a perspective lateral view of a tablet PC from prior art.

[0020] Fig. 1 shows a perspective lateral view of the invention in a conventional application as laptop, having a detachable keyboard **1**, a main screen **2** that is attached to the basic body **4** of the laptop with a central joint **3** so that it can be rotated and pivoted. It is also possible, if ergonomically desired, to detach the keyboard already during this application. In this example, the keyboard is connected to the computer in the basic body **4** via a customary infrared or radio interface.

[0021] Fig. 2 shows the invention when used as a presentation device. The keyboard **1** has been detached so that the operator can look at the second screen **5**. The main screen **2** is folded

backwards by 270 degrees. To enable the customer to view the image of the main screen correctly, it is electronically rotated by 180 degrees.

[0022] Fig. 3 shows a perspective lateral view of the invention as a tablet PC. The main screen **2** is located with its backside on the keyboard **1**. The folding function is identical to the function shown in Fig. 4.

[0023] Fig. 4 shows a perspective lateral view of a tablet PC from prior art in the phase of folding from notebook to tablet PC. This Tablet PC has no detachable keyboard and also no second screen.

Claims

1. A multifunctional notebook with
 - a basic body (**4**) having a detachable keyboard (**1**) and a hinged main screen (**2**), which is used to cover the basic body (**4**) with the keyboard (**1**),
 - a central joint (**3**) between the basic body and the main screen (**2**), wherein the central joint (**3**) allows for horizontally rotating the main screen (**2**) by 180° and vertically folding the main screen (**2**) by at least 180 degrees,
 - a second screen (**5**) located under the detachable keyboard (**1**) in the basic body (**4**), and
 - a control device for rotating the image of the main screen (**2**) by 180°.
2. A notebook according to Claim 1, characterized in that at least the second screen (**5**) has an OLED display.

Followed by 4 pages of drawings

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