

since there is no display unit **301** remaining there. Therefore, all the display contents of the display unit **301** are switched and the page-turn is complete.

[0094] As described above, when a page is turned up and down, the display contents above and below the boundary line are switched and the display on the display unit **301** appears as if the page is leafed through. If the turning speed increases when turning a page up and down, a plurality of boundary lines are displayed and the display control apparatus displays only the display content on the uppermost portion.

[0095] FIG. 6A is a schematic of an electronic book when its power is turned off. In FIG. 6A, a display unit **301** of an electronic book **300** is folded in two, the display unit **301** being folded inside so that an underside **310** of the display unit **301** becomes the outer side. This enables the electronic book **300** to be turned off, stopping the display of the display unit **301**. This double-fold state can be detected as a state when left and right detecting units are joined, for example, the left top edge detecting unit **302** to the right top edge detecting unit **305**, the left center edge detecting unit **303** to the right center edge detecting unit **306**, and the left bottom edge detecting unit **304** to the right bottom edge detecting unit **307** (at this time, the surfaces of the flex sensors do not use a capacitance system, or their capacitance system has to be cancelled). Another method is to provide a flex sensor in the center of the display unit **301** and detect a double-fold state when the inward bend of this flex sensor is smaller than a threshold angle.

[0096] FIG. 6B is a schematic of a display unit when the power of an electronic book is switched from OFF to ON. When the display control apparatus of the electronic book **300**, after detecting the OFF status as shown in FIG. 6A, detects that the electronic book **300** has been reopened as shown in FIG. 6B, the electronic book turns ON and the display unit **301** restarts to display. When switching to OFF is detected, the display content is normally recorded in a display content retaining unit of the display control apparatus. Therefore, when the electronic book turns ON again, the display unit **301** displays the recorded content in the retaining unit. However, when the settings are such that the previous display contents are not recorded and when obtained electronic book data is displayed for the first time, an index page shown in the display unit **301** of FIG. 6B is displayed.

[0097] FIG. 7A is a schematic for illustrating a bookmark index displayed on a display unit of an electronic book. When the left top edge detecting unit **302** of FIG. 3A is largely bent, the display contents are switched and a bookmark index is displayed. A bookmark index displays indexes relating to pages behind the display contents currently being displayed (in the case of a electronic book data opening to the right), and displays indexes **711** to **713** that are added by the marking function described in FIG. 3A. When the left top edge detecting unit **302** is bent further, headings of specific display contents are displayed in bookmark portions of the indexes **711** to **713**.

[0098] When the indexes **711** to **713** of FIG. 7A are bent, the display control apparatus switches the display such that pages corresponding to the indexes **711** to **713** are displayed. Similarly, when the right top edge detecting unit **305** is largely bent, an index relating to pages preceding the current

display contents (in the case of an electronic book data opening to the right) is displayed.

[0099] FIG. 7B is a schematic for illustrating a chapter index displayed on a display unit of an electronic book. When the left top edge detecting unit **302** of FIG. 3A is largely bent, the display contents are switched and a chapter index is displayed. The chapter index displays indexes relating to each chapter of pages behind the display contents currently being displayed (in the case of a electronic book data opening to the right), and displays indexes **721** to **726** that are added by the marking function described in FIG. 3A. When the left top edge detecting unit **302** is bent further, headings of specific display contents are displayed in bookmark portions of the indexes **721** to **726**.

[0100] The bookmark indexes and the chapter indexes are displayed when the detecting units detects a largely bending, and as to which index is displayed is determined by the number of bends. Therefore, the setting is such that the most frequently used index is displayed by the first bend. FIG. 7C is a schematic for illustrating another chapter indexes displayed on a display unit of a display control apparatus. Chapter indexes such as tabs **731** to **734** can be displayed instead of the chapter indexes shown in FIG. 7B. In still another display arrangement, contents like an index of an actual book can be displayed as shown in FIG. 6B.

[0101] By switching the display contents to the index in compliance with a predetermined process in this way, the display unit **301** can be used effectively. By displaying the index, it is possible to speedily turn to a desired page.

[0102] FIGS. 8A and 8B are flowcharts of display control procedures. These procedures are executed by a determining unit of the display control apparatus. It is determined whether there are bookmarks in the display content retaining unit of the display control apparatus (step **S801**). If there are bookmarks (step **S801**: YES), the latest marked pages, page *m* and page *m*+1, for example, are displayed on the display unit **301** (step **S802**) and the process shifts to step **S804**. The marking data of step **S802** is an example of a spread-open display of pages (*m* and *m*+1) indicated by the latest (in terms of time) bookmark data.

[0103] When it is determined at step **S801** that there is no mark (step **S801**: NO), a top page of the book data is displayed on the display unit **301** (step **S803**) and the process shifts to step **S804**. When making the basic settings, the top page of the book data displays a full listing of indexes such as that in FIG. 6B. Alternatively, the settings can be such that a page specified by the operator or display contents selected by the operator is displayed on the top page.

[0104] When the process of step **S802** or step **S803** ends, it is then determined whether one of the detecting units **302** to **307** has detected any bend (step **S804**). The determining unit waits in standby until a bend is detected (step **S804**: NO Loop) and, when one is detected (step **S804**: YES), the determining unit determines whether the detected bend is a page-turn operation (step **S805**).

[0105] If a page-turn operation is determined in step **S805** (step **S805**: YES), the display contents of the book data are switched on the display unit **301** such that as if the page is being turned (step **S806**). For example, the method described in FIGS. 5A to 5F can be used to make it "appear as if the page is being turned". When the process of step