

that are spaced apart from one another. The information to be read by touch is represented and read by touch on the surface of the support sheet **1**. The actuators for the activation or deactivation of the touch points **2** may be arranged for example in the lower portion of the support sheet **1**. The deflecting rollers **7** may be formed in such a way that they serve at the same time as erasing rollers and press out the touch points **2** into the activated state [sic] when the support sheet **1** is rolled over a deflecting roller **7**.

[0054] At least one of the deflecting rollers **7** is driven by a motor and thereby provides the circulation of the support sheet **1** in band form.

[0055] FIG. 4 shows a further embodiment of the device according to the invention, in which a number of support sheets **1** are respectively clamped in a circulating manner between two deflecting rollers **7** that are spaced apart from one another. The support sheets **1** in band form are aligned in such a way that they extend parallel to one another. For this purpose, the axes of the deflecting rollers **7** are in line with one another.

[0056] In the embodiment according to FIGS. 2 and 3, a line is represented on the support sheet **1** in band form, so that the line can be continuously displaced.

[0057] As a difference from this, in the embodiment according to FIG. 4, a character or a column of characters is represented by each support sheet **1** in band form and a reading line is defined by the multiplicity of support sheets **1** in band form arranged next to one another. The circulating direction of the support sheets **1** in band form is in this case transverse to the direction of the line.

[0058] FIG. 5 shows a further embodiment of the device. The support sheet **1** is in this case formed as a disk-shaped turntable **8**, which is rotated by a driving unit **9**, which acts on the center axis of the turntable **8**. The touch points **2** are arranged on the surface of the disk-shaped turntable **8** and can likewise be activated by actuators.

[0059] FIG. 6 shows a schematic cross-sectional view of a support sheet **1** with touch points **2**, which have according to the invention touch regions **3** in the form of a thickening in the central region of the touch point **2**, the touch regions **3** being held in the support sheet **1** by a thinner resilient bead in the form of a flexible boundary region **4**. Provided underneath the support sheet **1** is a roller actuator **11**, which substantially comprises a roller **12** which is carried by a rocker **13** mounted in a resiliently tiltable manner. The actuating portions **10** in this case run over the roller **12** and are pressed upward by the latter, so that the touch points **2** are brought into the activated state when the rocker **13** holds the roller directly underneath the support sheet **1**. This position can be fixed with the aid of an electromagnet **14**, which serves for the activation or deactivation of the rocker **13**, and consequently of the roller actuator **11**.

[0060] Provided between the touch points **2**, in the transverse direction in the manner of a link chain, are wedge-shaped tapers, so that improved flexibility is attained and facilitated deflection is achieved by a hinge-like behavior of the tapers.

[0061] FIG. 7 likewise shows a support sheet **1** in cross section, in which however a different embodiment of a roller actuator **11** is provided. A roller **12** is in turn supported by

a tiltable, resilient rocker **13** and serves for pressing the actuating portions **10** upward, in order to bring the touch points **2** into an activated state. In the case of this embodiment of the roller actuator **11**, provided at the free end of the tilting rocker **13**, and running transversely in relation to it, is a pivotably mounted blocking element **15**, which is likewise preloaded with the aid of a spring, so that the blocking element **15** is drawn into the blocking state. Provided in turn is an electromagnet **14**, with which however the blocking element **15** can be pivoted from the contact position with the rocker **13** into a release position. The roller **12** is then pressed downward by the actuating portion **10** without it being possible for a force to be exerted by the roller actuator **11** to press the actuating portion **10** upward, for its part, in order to bring the touch points **2** into the activated state.

[0062] In order that an optimum reading speed can be maintained, an optical sensor is preferably provided in the devices described above for adapting the speed to the reading speed. In one embodiment, a pressure sensor which regulates the speed in dependence on the pressure exerted on the support sheet during reading by touch may also be provided.

1. A device for the punctiform representation of graphical information which can be read by touch, in particular for the representation of Braille script, with a support sheet (1), with a multiplicity of systematically arranged touch points (2) and with actuators for activating or deactivating selected touch points (2), the touch points (2) being formed integrally with the support sheet (1), and an erasing element being provided, to bring all the touch points (2) into the activated state or into a deactivated state by springing back of the touch region (3) on or below the plane which is formed by the touch surface of the support sheet (1), characterized in that

the touch points (2) have a touch region (3), which, in the activated state, protrudes beyond the plane formed by the touch surface of the support sheet (2), and a flexible boundary region (4) between the support sheet (1) and the touch region (3), the boundary region (4) having a lower thickness and/or rigidity than the support sheet (1) and the touch region (3), and

the touch region (3) has an actuating portion, protruding beyond the underside of the support sheet (1) that lies opposite from the touch surface of the support sheet (1).

2. The device as claimed in claim 1, characterized in that the support sheet (1) is formed with a plastic.

3. The device as claimed in claim 2, characterized in that the plastic is polyurethane.

4. The device as claimed in one of claims 1 to 3, characterized in that the support sheet (1) has a flexible, fiber-reinforced layer.

5. The device as claimed in one of claims 1 to 4, characterized in that the support sheet (1) is a continuous band.

6. The device as claimed in claim 5, characterized by a driving unit with at least one deflecting roller (7) and with tooth flanks (6) or tapers on the support sheet (1) for engagement in the at least one deflecting roller (7).

7. The device as claimed in claim 6, characterized in that the touch points (2) are respectively arranged in the regions between the tooth flanks (6) or tapers.