

[0026] Preferably, said flexible output means is a display.

[0027] Advantageously, the size of the display can be changed to a high extent. This allows construction of a small device with a large enough display to show a large amount of information at any one time, for example a WWW (World Wide Web) page or e-mail.

[0028] Preferably said output means and said input means are arranged so that the input device has two states corresponding to the first and second states of both input means and output means. In the first state both the input means and the output means are compacted and in the second state both the input means and the output means are extended. This provides the advantage of either simultaneous extension or simultaneous compaction of both the input means and the output means.

[0029] Preferably, the electronic input device comprises a hinge for foldingly connecting the housing defining the space for accommodating said flexible output means to the housing defining a space for accommodating said input means. This provides an electronic input device, which has a relatively large display, and a relatively large input means and yet can be packed into a compact configuration. This is particularly useful in reducing the size of an electronic input device that is always carried by a user.

[0030] Preferably, the electronic input device is a telecommunications device. The telecommunications device may have a data terminal mode in its extended spatial configuration and a telephone mode in its compacted spatial configuration.

[0031] Preferably, the electronic input device comprises:

[0032] two elements, which are foldable about a hinge between an open configuration and a closed configuration,

[0033] a speaker located in one element, and

[0034] a microphone in another element.

[0035] The telecommunications device is unfoldable to separate the microphone and the speaker. In this way the speaker may be located conveniently close to a user's mouth and the microphone may be located conveniently close to the user's ear. Advantageously the elements can be folded together to reduce their size of the electronic input device.

[0036] Preferably, the electronic input device further comprises:

[0037] a stop to prevent the device being opened beyond a certain maximum opening angle, and

a means for changing the maximum opening angle when the configuration of the device is changed between the compacted spatial configuration and the extended spatial configuration. This provides different maximum opening angles for when the device is to be used in a telephone mode and when it is to be used in a data terminal mode. For example, it is possible to reduce the opening of the device to a convenient viewing angle for the data terminal mode. In the telephone mode, the mobile station can be further opened to increase the distance of the microphone and the speaker from each other.

## BRIEF DESCRIPTION OF THE DRAWINGS

[0038] The invention will now be described, by way of example only, with reference to the accompanying drawings, in which:

[0039] **FIG. 1** shows a perspective view from the front of a mobile station in a transport mode;

[0040] **FIG. 2** shows a side view of the mobile station of **FIG. 1** in a telephone mode;

[0041] **FIG. 3** shows a perspective view from the front of the mobile station of **FIG. 1** in a telephone mode;

[0042] **FIG. 4** shows a perspective view from the front of the mobile station of **FIG. 1** in a data terminal mode;

[0043] **FIG. 5** shows an example of a support mechanism;

[0044] **FIG. 6** shows a front view of the mobile station of **FIG. 1** in a partially extended mode;

[0045] **FIG. 7** shows a cross section of the mobile station of **FIG. 6** along line A-A'; and

[0046] **FIG. 8** shows enlarged detail of **FIG. 6**.

## DETAILED DESCRIPTION

[0047] **FIG. 1** shows a mobile station MS in a retracted configuration, which is suitable for transportation and to be carried by a user, for example in a pocket. It can be seen that in this retracted, or folded-up, configuration the mobile station is basically of a cylindrical shape. The mobile station comprises four elements **10**, **11**, **12**, and **13**, which have outwardly facing curved surfaces defining the cylindrical shape. The elements are a lower storage element **10**, an upper storage element **11**, a battery element **12** and an electronics housing element **13**. The battery element **12** contains a battery for operating the mobile station. The electronics housing element **13** contains mobile station electronics to enable the mobile station to be used as, among other things, a mobile telephone and as a data terminal.

[0048] Referring now to **FIGS. 2 and 3** it can be seen that elements **11** and **10** and elements **13** and **12** are hinged together with hinges **18**. The elements **10** and **12** are adjacent to each other and form a first hinged entity. The elements **11** and **13** are correspondingly adjacent to each other and form a second hinged entity. Both of the hinged entities each move about the hinges as a unit. The mobile station is provided with a latch (not shown) to resist it being accidentally opened. Alternatively, friction means may be provided for this purpose.

[0049] **FIG. 3** shows a perspective view from the front of the mobile station of **FIG. 1** in an opened, that is telephone, configuration. The first and second entities have been moved relatively with respect to each other about the hinges **18** and are disposed at an angle of about 115°. This is a comfortable angle for the mobile station to be used as a telephone or as a data terminal as will be described below. The opened configuration reveals a telephone speaker **20** located close to the upper end of the electronics housing element **13** and a microphone **21** located close to the lower end of the battery element **12**. A telephone keypad **22** can be seen on a surface of the battery element **12**, which surface faces a corresponding surface of the lower storage element **10**. In another