

device **100**. Storage device **110** may be any disk based or solid state memory device for storing data. Power source **112** may be a battery, solar panels for receiving and storing solar energy, or a device for receiving and storing wireless power as described in U.S. Pat. No. 7,027,311 herein incorporated by reference as if fully set forth.

In device **100**, one or more network adapters **128** may be configured as a Time division multiple access (TDMA), code division multiple access (CDMA), orthogonal frequency-division multiplexing (OFDM), Orthogonal Frequency-Division Multiple Access (OFDMA), Global System for Mobile (GSM) communications, Enhanced Data rates for GSM Evolution (EDGE), General Packet Radio Service (GPRS), cdma2000, wideband CDMA (W-CDMA), long term evolution (LTE), 802.11x, Wi-Max, mobile Wi-MAX, or any other wireless or wired transceiver for modulating and demodulating information communicated via one or more antennas **130**.

In one embodiment of the present invention, one or more network adapters **128** are configured to only handle data traffic thereby eliminating the need for circuitry and software for handling voice traffic. This is advantageous as the circuitry for handling and processing voice traffic in mobile devices occupies substantial space, adds complexity, and results in unneeded cost for a digital periodical device where voice capability may be unnecessary.

FIG. 2 is a diagram of a digital periodical or advertising device **200** having one or more electronic flexible screen or display devices **202**. The one or more electronic flexible screen or display devices **202** may be configured, manufactured, produced, or assembled based on the descriptions provided in US Patent Publication Nos. 2007-247422, 2007-139391, 2007-085838, or 2006-096392 or U.S. Pat. No. 7,050,835 or WO Publication 2007-012899 all herein incorporated by reference as if fully set forth. The one or more electronic flexible screen or display devices **202** may be configured and assembled using organic light emitting diodes (OLED), liquid crystal displays using flexible substrate technology, flexible transistors, field emission displays (FED) using flexible substrate technology, as desired. In the case for multiple electronic flexible screens or display devices **202**, rotation **214** reveals a second electronic flexible screen or display device **203** on the back of device **200**.

Any one of housing members **204** and **206** selectively house certain hardware components described in device **100** such as one or more processors **102**, memory **106**, one or more sensors **126**, and one or more network adapters **128**. In one embodiment of the invention, housing members **204** and **206** may each have individual transmitting/receiving antennas **216** and **218** for providing spatial and time diversity. One or more electronic flexible screen or display devices **202** can optionally be configured to collapse **208** and roll up into housing members **204** or **206** for portability. For orientating device **200** in a circular manner for a presentation or posting on a lightpost as an advertisement, attachment members **210** and **212** may be used. Housing members **204** and **206** may be rectangular or cylindrical and provide grasping positions, the ability to position device **200** upright on a flat surface, or the ability to mount device **200** on a flat surface, as desired. It is appreciated by one skilled in the art that housing members **204** and **206** and one or more electronic flexible screen or display devices **202** are not drawn to scale. They may have different shapes and dimensions while configured to provide the same functionality provided herewith.

Still referring to FIG. 2, in another embodiment device **200** may optionally have a liquid crystal display (LCD), LED, FED, or OLED display unit **220**. For this case, when one or more electronic flexible screen or display devices **202** is col-

lapsed into housing member **206** adjacent display unit **220** is still available for displaying content. When one or more electronic flexible screen or display devices **202** is expanded out of housing member **204** or **206**, the combination of display unit **220** and flexible screen or display devices **202** provides a larger screen size for a single graphical feed or for having separate graphical feeds or windows in each display unit, as desired. In this configuration, the images displayed on flexible screen or display devices **202** can be responsive to one or more sensors **126** detecting a bending of flexible screen or display devices **202**.

FIG. 3 is a diagram of a system for providing and communicating mass media documents, multimedia documents, or any multimedia content in accordance with an embodiment of the present invention. Server or computer **300** may be configured as a web server, a multimedia messaging service center (MMSC), an MMS relay server, or a personal computer, as desired. Server or computer **300** at least comprises memory **302** coupled to one or more processors **310**, one or more network adapters **312**, and wireless power transmitter **320** via computer bus **305**. One or more network adapters **312** may be configured to implement any one of wireless or wired technologies given above. Wireless power transmitter **320** may be configured to provide power to device **318** as described in U.S. Pat. No. 7,027,311 herein incorporated by reference as if fully set forth.

Memory **302** comprises a converter engine **304** having documents or content **306** and **308** that may be in a Microsoft WORD format, a Microsoft EXCEL format including graphs, a portable document format (PDF), a PDF document having embedded multimedia advertisements including video and audio, an update for a PDF document previously transmitted for updating embedded multimedia advertisements including video and audio, a hypertext markup language (HTML) format, a Microsoft PowerPoint presentation format, a digital multimedia periodical document, a digital periodical document having embedded multimedia advertisements, a digital advertising format, part of a digital advertising format, a selected subset of a multimedia document or the like having multimedia information. Converter engine **304** extracts, parses, and/or segments document **306** by detecting one or more video elements **306₁**, one or more audio elements **306₂**, one or more image elements **306₃**, or one or more text elements **306₄**. The video elements **306₁** may be flash video, shockwave video, MPEG video, streaming video, Advanced Video Coding (AVC), H.264 video, or the like. The audio elements **306₂** may be an MP3, WAV, Advanced Audio Coding (AAC), streaming audio, or the like. The image elements **306₃** may be JPEG, TIFF, bitmap, or the like.

One or more text elements **306₄** may represent the body of document **306** that is divided into multiple parts. Any one of elements **306₁-306₄** may also represent dynamic advertising information, such as video or audio, that is embedded into document **306**. The dynamic advertising information may be updated based on user preferences, a target audience, location, or the like. In an embodiment of the present invention, document **306** is a PDF document and elements **306₁-306₄** sent via MMS are updates to multimedia advertising pre-existing in the PDF document that are PUSHED to user agent **316** by computer or server **300**.

Multimedia messaging service (MMS) is capable of communicating at least the following types of content:

1. short message service (SMS) types;
2. plain text;
3. speech;
4. audio;
5. synthetic audio, such as Scalable Polyphony MIDI;