

field for the URL of the MMSC 120. The MMSC address is preferably mapped to the "Host" address field of an outgoing MM.

[0035] The MMS UA 201, 202 preferably stores "hard-coded" values for the retrieve and submit paths to be used in HTTP communication with the MMSC 120. The submit path is preferably, e.g., "/cgi-bin/sendreq.cgi?" and the retrieve path is preferably, e.g., "/cgi-bin/retrieve.cgi?". The URL of the retrievable MM is preferably appended onto the retrieve path in GET messages.

[0036] MM Notification

[0037] The MMS User Agent 201, 202 may present a "View My Notifications" or similar option in the user interface.

[0038] The MMS User Agent 201, 202 interfaces with an SMS client that interworks with the 1xRTT wireless access cards SMS functionality.

[0039] The MMS User Agent 201, 202 monitors incoming SMS messages for conversion to MMS Notifications.

[0040] The MMS User Agent 201, 202 preferably has the ability to prevent the SMS Client from displaying the SMS Message or alerting the subscriber of a new SMS.

[0041] The MMS User Agent 201, 202 receives MM Notifications within the message body of Short Messages with the following fields. The MMS User Agent validates and parses these fields. The MMS User Agent 201, 202, in parsing the comma-delimited Short_Message field of the Submit_SM Message, recognizes the following preferred fields in the following preferred order: "Type of message" (m-not), "From" (410303476), "Subject" (World Leaders), and so on. See example 4.0 for details. Reference Table 4.0 for field details.

TABLE 1.0

MM Notification Elements		
Name	Content	Description
Type	m-not	Specifies the transaction type.
From	From-value	Address of the message sender. If address hiding is supported, the MMS Relay may not add this field to the message header.
Priority	Priority-value	Priority of the Message, Low, Normal, or High
Size	Message-size-value	Full size of message in octets.
URL	Content-location-value	Defines the location of the message.
Subject	Subject-value	Subject of the message

[0042] The MMS User Agent 201, 202 stores the MM Notification data and preferably supports the storage of multiple MM Notifications simultaneously. With multiple Notifications on the Pocket PC 101, 102, each may be displayed in a list, e.g., titled "You Have Notifications From:" allowing individual notifications to be selected. Notifications may be listed by the value in the "From" field.

[0043] The MMS User Agent 201, 202 may display the From, Subject, Message Size (in KB, though received in Octets), and Priority in a user-friendly manner, along with options to either "Retrieve Now" or "Retrieve Later". This may be within an "MMS Alert" popup window or message box upon receipt of the MM notification.

[0044] Retrieval

[0045] The MMS User Agent 201, 202 initiates a 1xRTT wireless Internet session with the Verizon Express Network, in response to a "Retrieve Now" selection by the subscriber.

[0046] The MMS User Agent 201, 202 initiates an HTTP GET Request directed to the MMSC's URL after session establishment, and after the subscribers chooses the "Retrieve Now" option. The URL is composed of the Retrieve Path hardcoded as "/cgi-bin/retrieve.cgi?" (see Section III) followed by the URL from the Notification.

EXAMPLE 1.0

[0047] GET request Message for an MM at ooeygooyey.telecomsys.com with URL "/cgi-bin/retrieve.cgi?r=4103036476&f=123456789012345678901234"

[0048] GET /cgi-bin/retrieve.cgi?r=4103036476&f=123456789012345678901234

[0049] HTTP/1.1

[0050] Host: ooeygooyey.telecomsys.com

[0051] The MMS User Agent 201, 202 accepts MIME multipart content in the GET Response message that results.

[0052] The MMS User Agent 201, 202 may, upon receipt of the GET Response, display the image and text MIME parts that are encapsulated within it, and may display Date, From, To, Cc, Priority, and Subject fields. The image may, e.g., appear centered in the User Agent display with the text as a caption below it. If a WAV file was included, the UA 201, 202 may either play the WAV automatically or present the option to play it on command.

TABLE 2.0

MM Retrieval Elements		
Name	Content	Description
Date	Date-value	Sending date and time.
From	From-value	Address of the message sender. If address hiding is supported, MMS Relay may set the 'From' field to 'Anonymous'.
To	To-value	Recipient address.
Cc	Cc-value	Recipient address.
Subject	Subject-value	Subject of the message.
X-Mms-Priority	Priority-value	Priority of the message. Default = Normal.
Content-Type	Content-type-value	The content type of the message.
Message Body	Message Body	The MIME encapsulated MM components.

EXAMPLE 2.0

[0053] GET response Message (M-retrieve.conf)

```

HTTP/1.1 200 OK
Content-encoding: 7bit
Content-Type: text/html
Content-Length: XXX
Date: Tue, Jun 11 2002 15:41:00 GMT
From: 4103036476
To: 4103036475, demo2@yahoo.com
Cc: demo@yahoo.com
    
```