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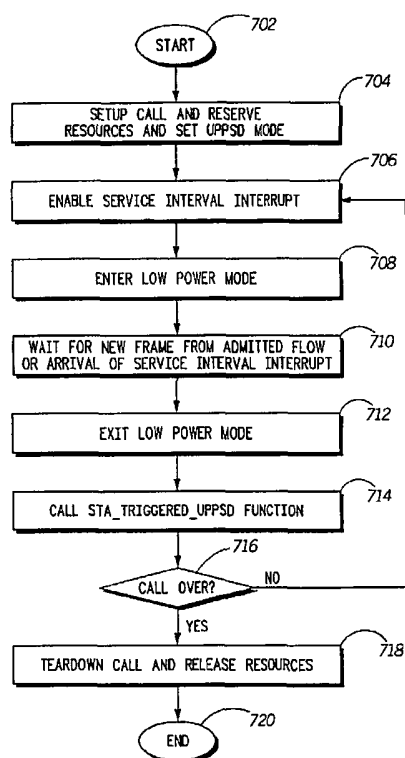
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[Continued on next page]

(54) Title: UPLINK POLL-BASED POWER SAVE DELIVERY METHOD IN A WIRELESS LOCAL AREA NETWORK FOR REAL TIME COMMUNICATION



(57) Abstract: A mobile station (106) establishes a real time communication link via an access point (102) for carrying voice or other time-sensitive data. A WLAN subsystem (204) of the mobile station is normally kept in a low power state. Upon initiating a communication link the mobile station signals to the access point that uplink poll-based power save delivery mode will be used (614), and the access point reserves resources to assure the necessary quality of service. The mobile station initiates a frame transaction by first powering up the WLAN subsystem (712), acquiring the WLAN channel (407), and transmitting a polling frame. Upon successful receipt of the polling frame the access point prepares to reply with a response frame at an unspecified time within service window, during which time the mobile station maintains the WLAN subsystem power up and ready to receive the response frame. Upon successful receipt of the response frame, the mobile station places the WLAN subsystem back into a low power state.

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INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER

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US CL : 370/311, 338

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 370/311, 318, 328, 329, 338, 346, 347, 348, 443, 444, 445, 447, 448, 449, 462

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2003/0093526 A1 (NANDAGOPALAN et al) 15 March 2003 (15.03.2003), see entire document.	1-16
A, P	US 2004/0131019 A1 (KANDALA) 08 July 2004 (08.07.2004), see entire document.	1-16
A, T	2005/0009578 A1 (LIU) 13 January 2005 (13.01.2005), see entire document.	1-16
A, T	US 2004/0253996 A1 (CHEN et al) 16 December 2004 (16.12.2004), see entire document.	1-16
A, P	US 2004/0190467 A1 (LIU et al) 30 September 2004 (30.09.2004), see entire document.	1-16
A, P	US 6,791,962 B2 (WENTINK) 14 September 2004 (14.09.2004), see entire document.	1-16
A, P	US 2004/0081133 A1 (SMAVATKUL et al) 29 April 2004 (29.04.2009), see entire document.	1-16

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"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	"&" document member of the same patent family

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