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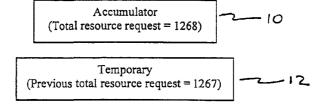
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(54) Title: ENERGY HISTORY BUFFER



History Array Minute No. 6 Minute No. 7 (1234) History Array Minute No. 7 (1256)	History Array Minute No. 8 (952)	History Array Minute No. 9 (967)	2-14
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(57) Abstract: A method for time-synchronous data collection allowing for the performance of time-critical calculations. More specifically, successive measurements of the amount of a resource used per unit of time are taken and stored in a series of memories. The first memory (10) is a current value of the cumulative total use of the resource. The second memory (12) is the immediately proceeding cumulative total usage of the resource. The third memory (14) is a ring buffer that holds measured totals of resource usage that are time-stamped to correspond to the unit of time during which they were measured. These values are then used to determine total resource usage, the time of use, the peak times of usage and demand/load profiles on the resource's delivery system over different time periods. Such periods, for example, may be as short as one minute or as long as one hour.



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INTERNATIONAL SEARCH REPORT

In mal application No. PCT/US01/11496

	SIFICATION OF SUBJECT MATTER		,
US CL :	Please See Extra Sheet. 340/870.02, 870.03; 702/178, 62; 324/142, 103 o International Patent Classification (IPC) or to both n	ational classification and IPC	
	DS SEARCHED		
Minimum de	ocumentation searched (classification system followed	by classification symbols)	
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Documentati	ion searched other than minimum documentation to the e	xtent that such documents are included in	the fields searched
Electronic d	ata base consulted during the international search (nam	nc of data base and, where practicable,	search terms used)
EAST searc tem	ns: ring buffer, fifo, tou, time of use, time-of-use, b	uffer, energy, meter	
C. DOC	uments considered to be relevant		
Category*	Citation of document, with indication, where app	propriate, of the relevant passages	Relevant to claim No.
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x	US 6,006,212 A (SCHLEICH et al) 21 DECEMBER 1999, all		1-19
A	US 4,792,677 A (EDWARDS et al) 20 DECEMBER 1988, ALL		1-19
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A	US 5,377,114 A (GROSS) 27 DECEMBER 1994, ALL		1-19
A	US 5,270,639 A (MOORE) 14 DECEMBER 1993, ALL		1-19
A	US 5,311,068 A (MILLER) 10 MAY 1994, ALL		1-19
X Furt	her documents are listed in the continuation of Box C	. See patent family annex.	
"A" do	Special categories of cited documents: "T" Inter document published after the international filing date or private and not in conflict with the application but cited to understing the general state of the art which is not considered "A" document defining the general state of the art which is not considered the principle or theory underlying the invention		lication but cited to understand
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Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
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7	US 5,994,892 A (TURINO et al) 30 NOVEMBER 1999, ALL	1-19

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A. CLASSIFICATION OF SUBJECT MATTER: IPC (7):
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