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[54] **SYNCHRONOUS DATA LINK SLOW-POLL PROTOCOL**

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[22] Filed: **Nov. 9, 1982**

[51] **Int. Cl.**³ **G06F 3/00**

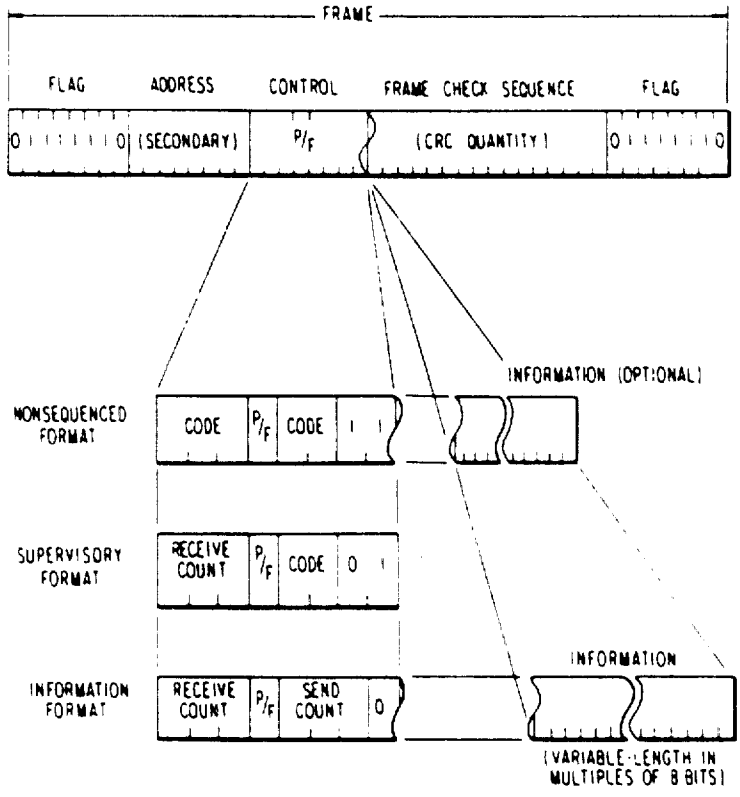
[52] **U.S. Cl.** **364/200**; 340/825.08; 370/96; 370/90; 375/106; 371/2

[57] **ABSTRACT**

A first data processor (**10**) and at least a second data processor (**11**) are connected by a data link (**12**). The processors each have a communication adapter (**14**) which is connected to the data link and system clock (**21**) which times functions within the processor. Under a synchronous data link control (SDLC) protocol which has information frames and supervisory frames, one of the processors is designated as the primary station and the other, the secondary station. Whenever supervisory frames are transmitted between the primary and secondary stations, means are operative for inserting a mandatory non-polling quiet period of a predetermined length prior to each poll so that the processor at the secondary station is freed for non-polling functions.

10 Claims, 3 Sheets Drawing,

13 Pages Specification



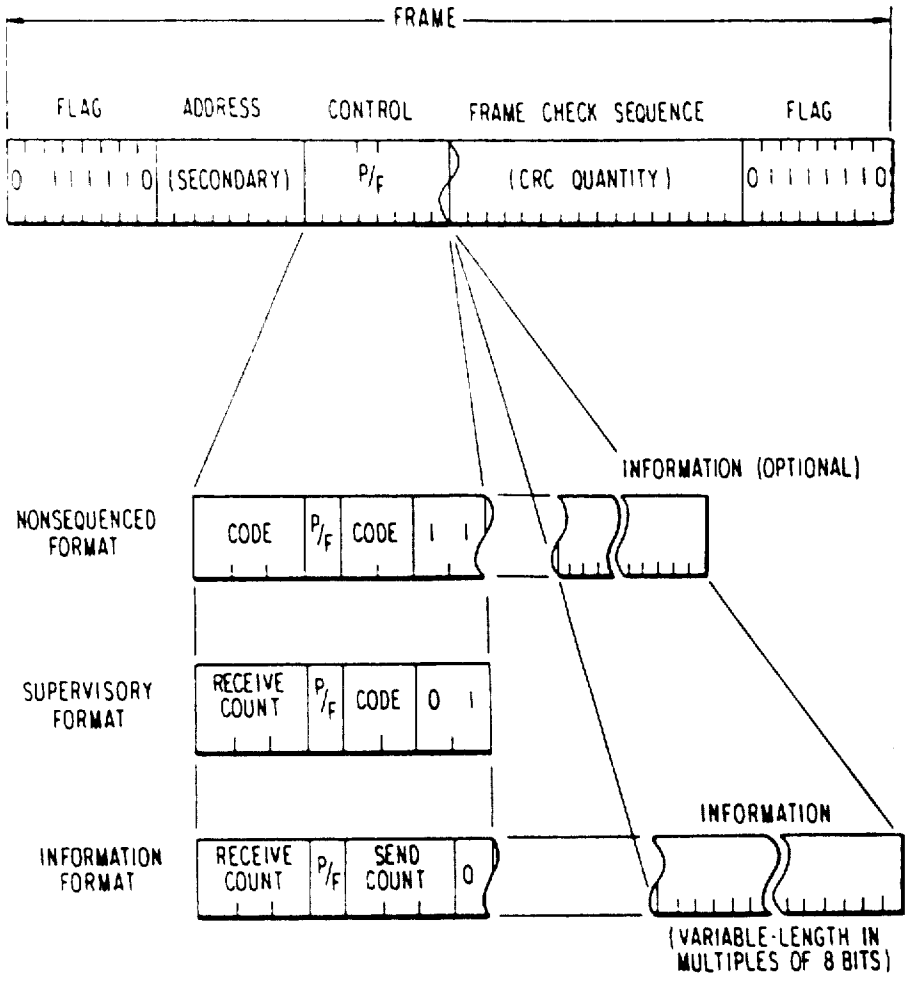

FRAME
FLAG
ADDRESS
CONTROL
FRAME CHECK SEQUENCE
FLAG
0 1 1 1 1 1 0
(SECONDARY)
P/F
(CRC QUANTITY)
0 1 1 1 1 1 1 0
INFORMATION (OPTIONAL)
NONSEQUENCED FORMAT
CODE
P/F
CODE
1 1
SUPERVISORY FORMAT
RECEIVE COUNT
P/F
CODE
0 1
INFORMATION FORMAT
RECEIVE COUNT
P/F
SEND COUNT
0
INFORMATION
(VARIABLE-LENGTH IN MULTIPLES OF 8 BITS)

FIG 1

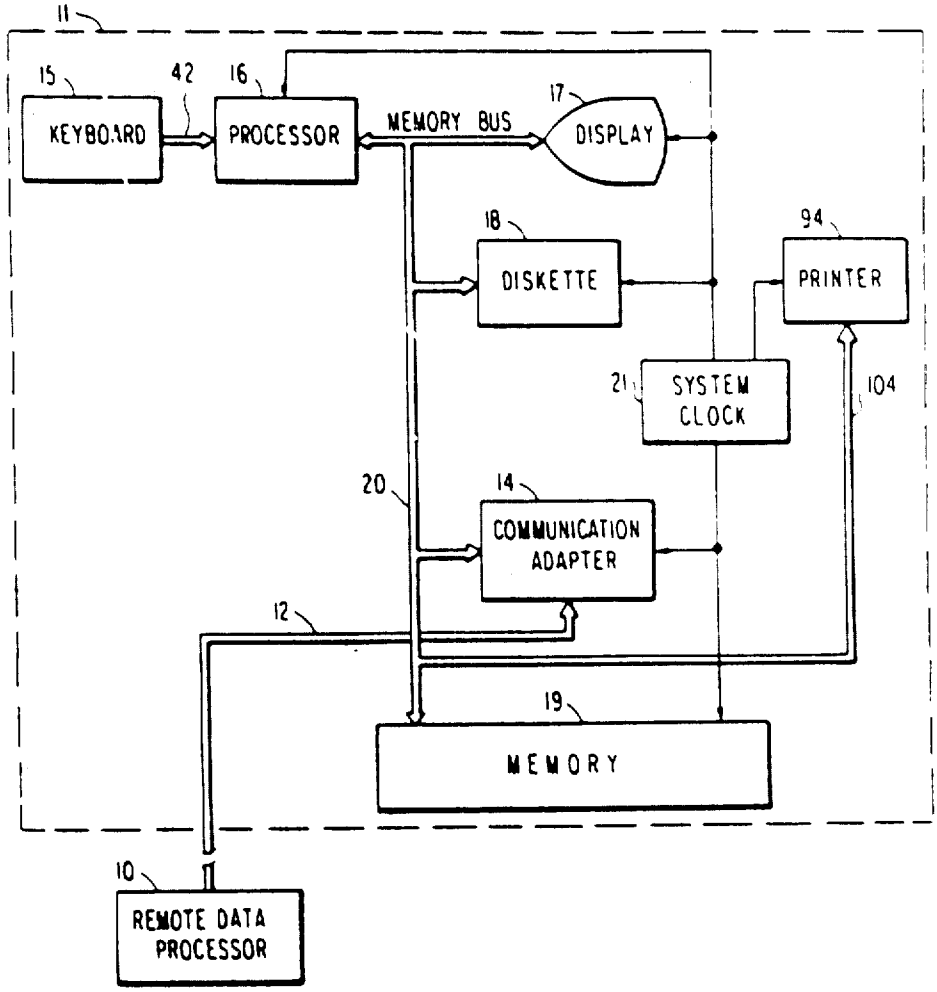

11
15
42
16
17
KEYBOARD
PROCESSOR
MEMORY BUS
DISPLAY
18
94
DISKETTE
PRINTER
21
SYSTEM CLOCK
104
20
14
COMMUNICATION ADAPTER
12
19
MEMORY
10
REMOTE DATA PROCESSOR

FIG. 2

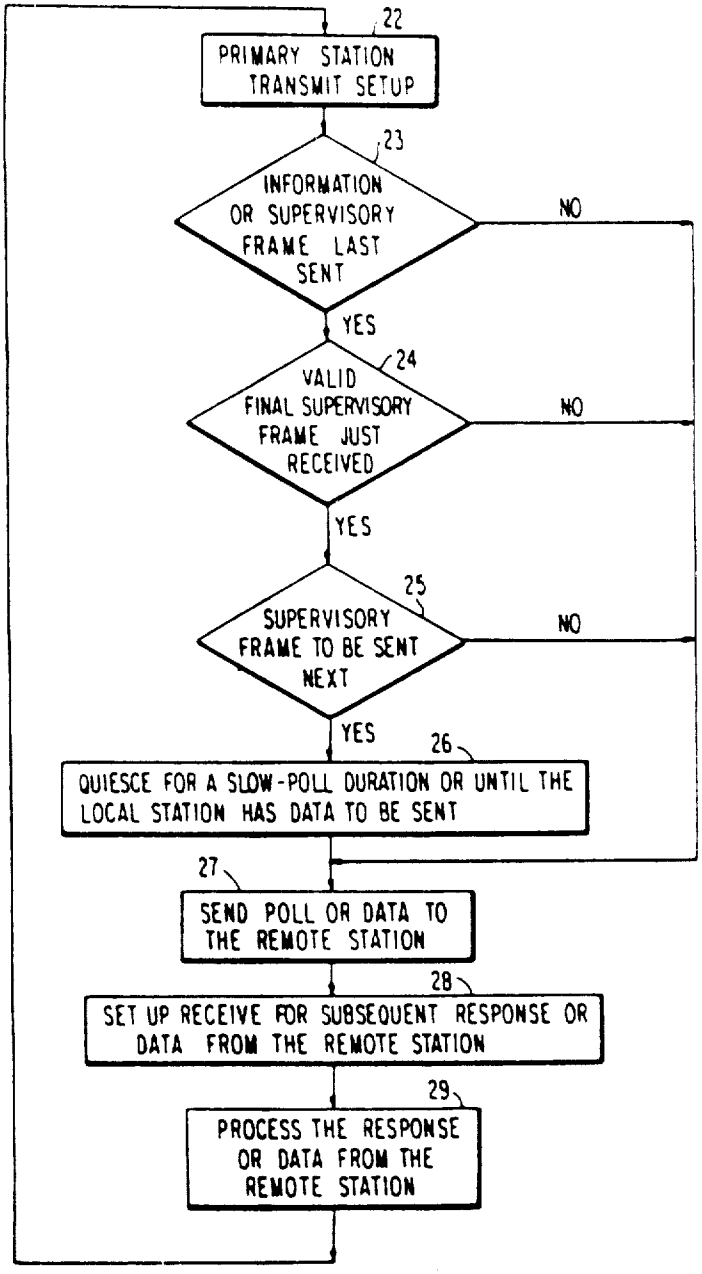

22
PRIMARY STATION TRANSMIT SETUP
23
INFORMATION OR SUPERVISORY FRAME LAST SENT
NO
YES
24
VALID FINAL SUPERVISORY FRAME JUST RECEIVED
NO
YES
25
SUPERVISORY FRAME TO BE SENT NEXT
NO
YES
26
QUIESCE FOR A SLOW-POLL DURATION OR UNTIL THE LOCAL STATION HAS DATA TO BE SENT
27
SEND POLL OR DATA TO THE REMOTE STATION
28
SET UP RECEIVE FOR SUBSEQUENT RESPONSE OR DATA FROM THE REMOTE STATION
29
PROCESS THE RESPONSE OR DATA FROM THE REMOTE STATION

FIG 3