TDM
A
CHANNEL 1
CHANNEL N
CDM
A
CHANNEL 1
CHANNEL 2
CHANNEL N
CODE

FIGURE 1

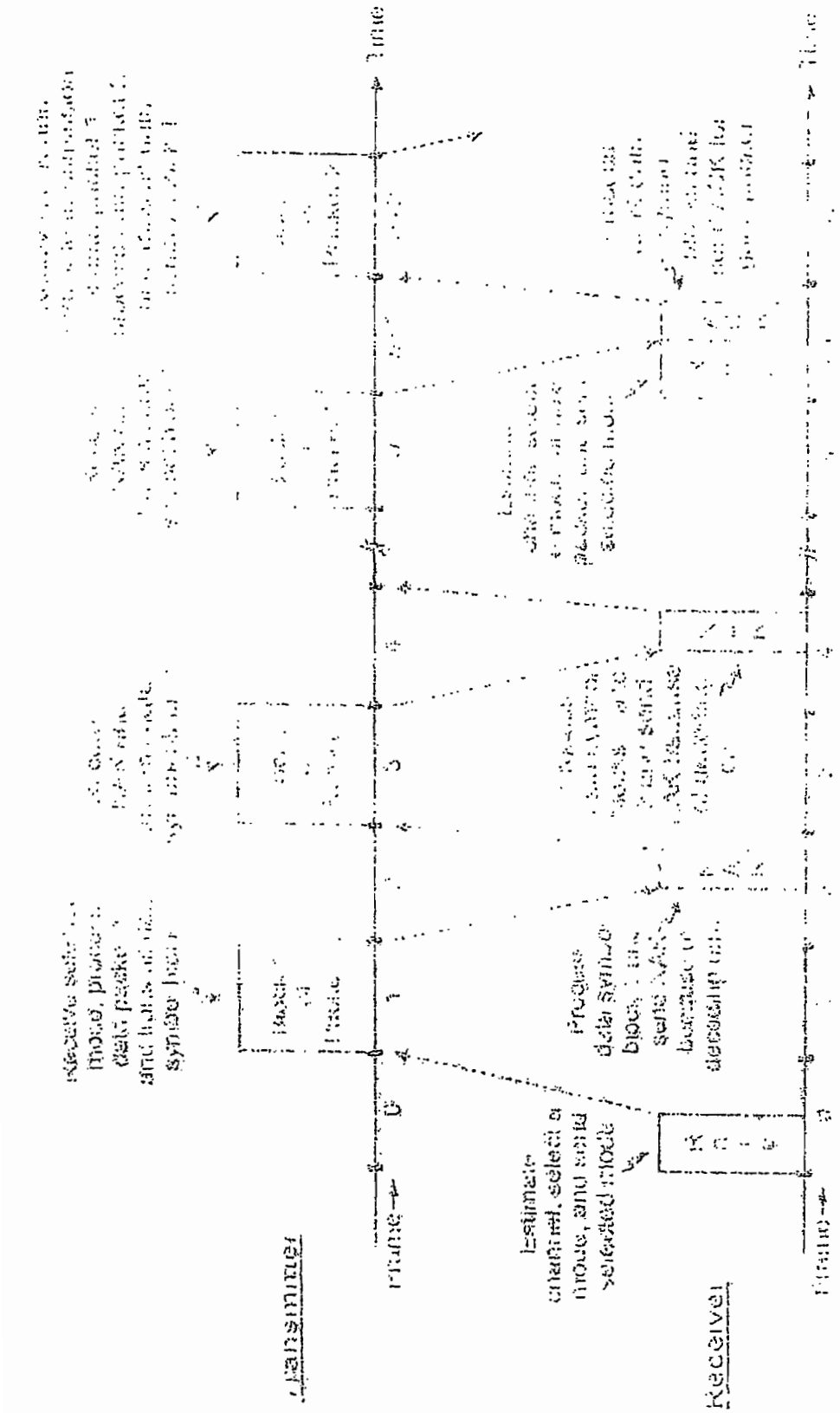

Transmitter
Receiver
Time
Time
Time
Time
Frame
Frame
Frame
Frame
Preamble
Preamble
Preamble
Preamble
Data
Data
Data
Data
Estimate channel, select a mode, and send selected mode
Process data symbols based on selected mode

FIG. 8

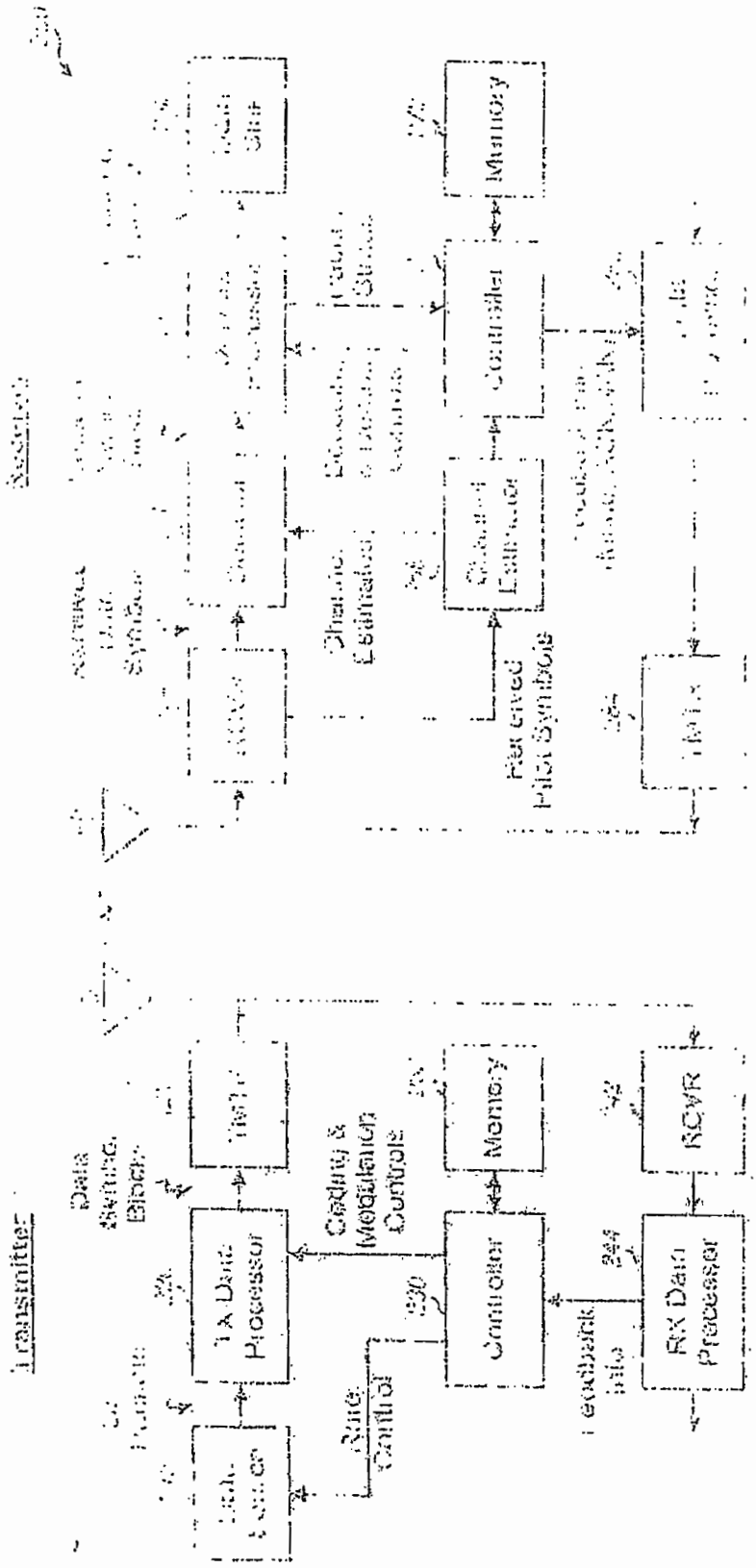

Transmitter
Data Source
Data Buffer
TX Data Processor
Pilot
Modulation Controls
Memory
Controller
Receiver
RX Data Processor
Feedback Info
Channel Estimator
Pilot Symbols
Controller
Memory

FIG. 3

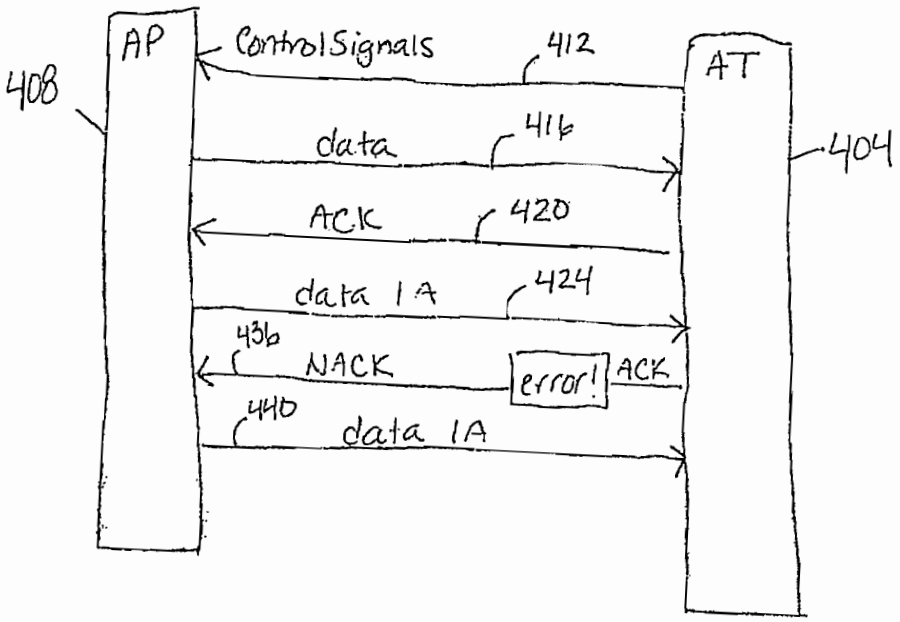

AP
408
Control Signals
412
AT
404
data
416
ACK
420
data 1A
424
436
NACK
error!
ACK
440
data 1A
400

Fig. 4

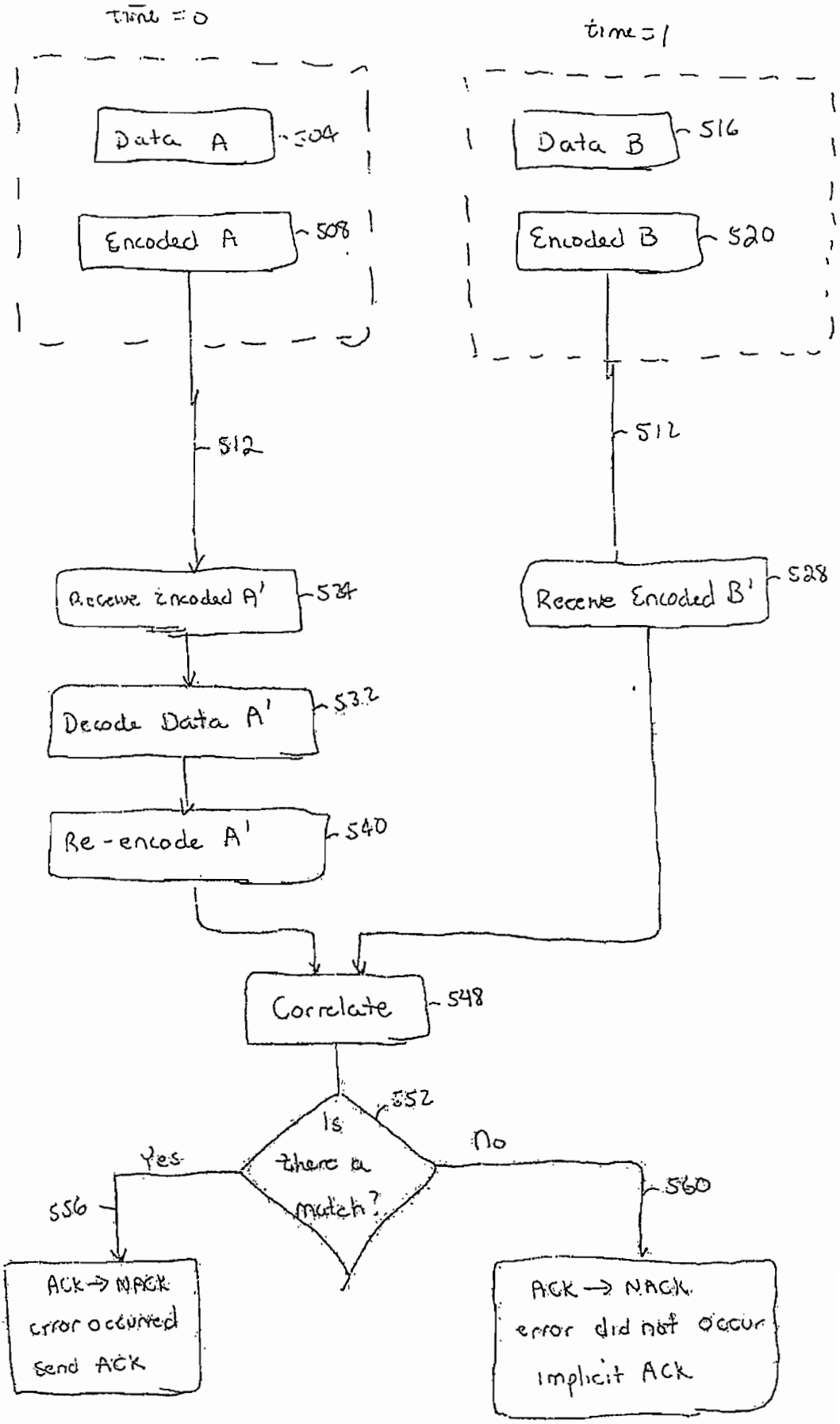

time = 0
time = 1
Data A
504
Encoded A
508
Data B
516
Encoded B
520
512
512
Receive Encoded A'
524
Receive Encoded B'
528
Decode Data A'
532
Re-encode A'
540
Correlate
548
552
Is there a match?
Yes
No
556
560
ACK → NACK error occurred Send ACK
ACK → NACK error did not occur Implicit ACK

Figure 5

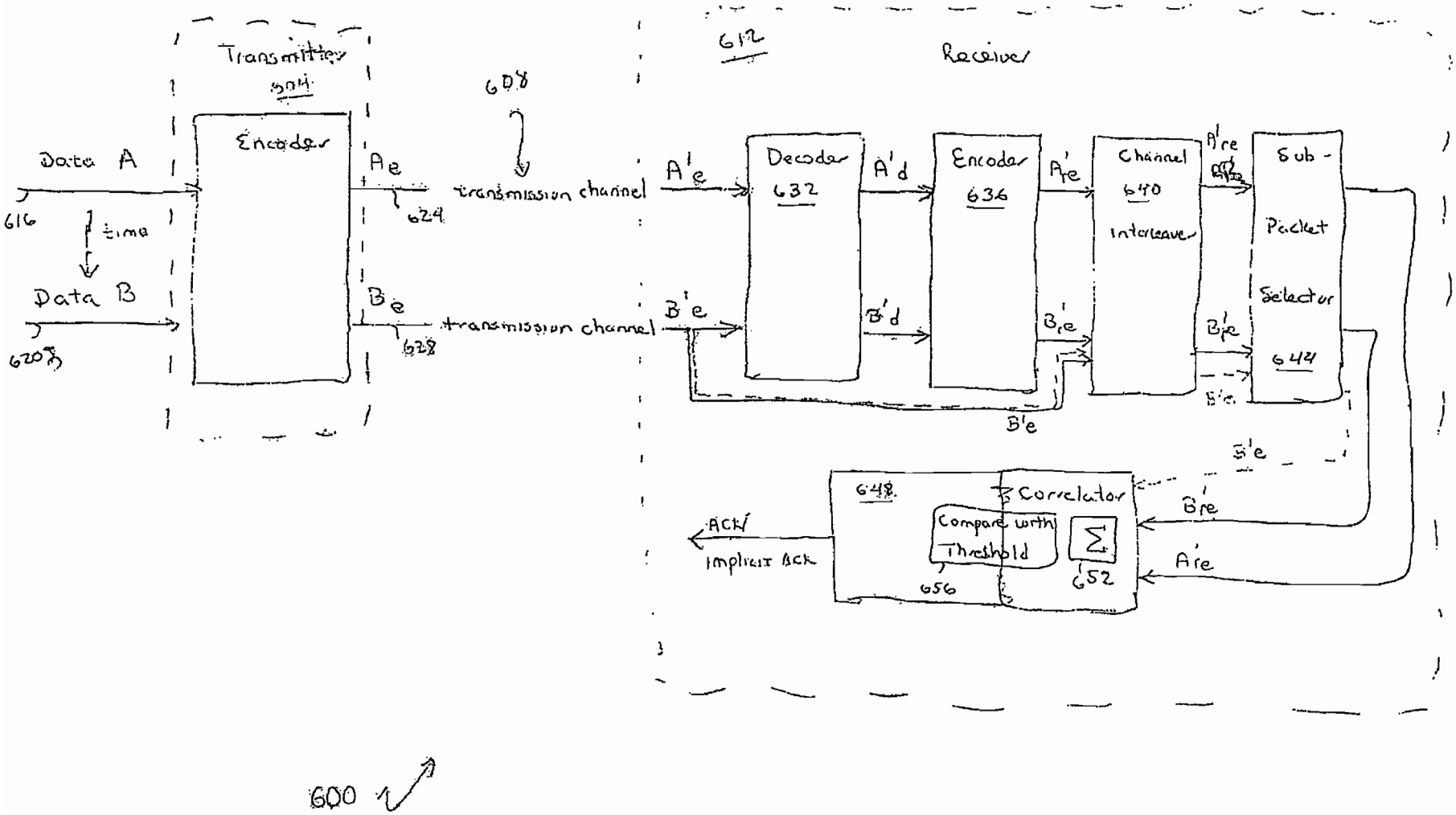


Fig 6

Illustrates a block diagram of a ACK → NACK error detector

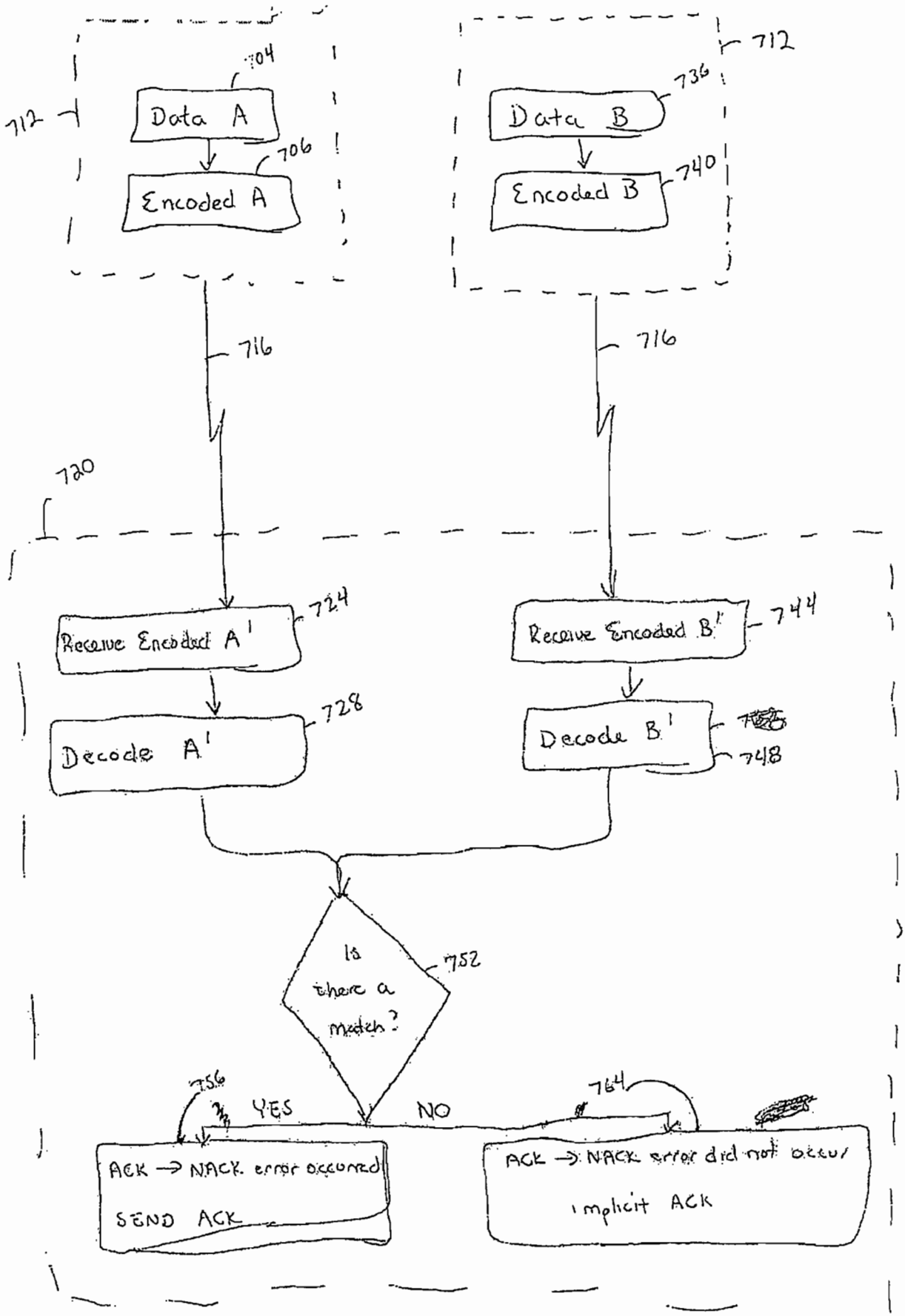

712
704
Data A
706
Encoded A
712
736
Data B
740
Encoded B
716
716
720
724
Receive Encoded A'
728
Decode A'
744
Receive Encoded B'
748
Decode B'
752
Is there a match?
756
YES
NO
764
ACK → NACK. error occurred
SEND ACK
ACK → NACK error did not occur
implicit ACK

Figure 7