

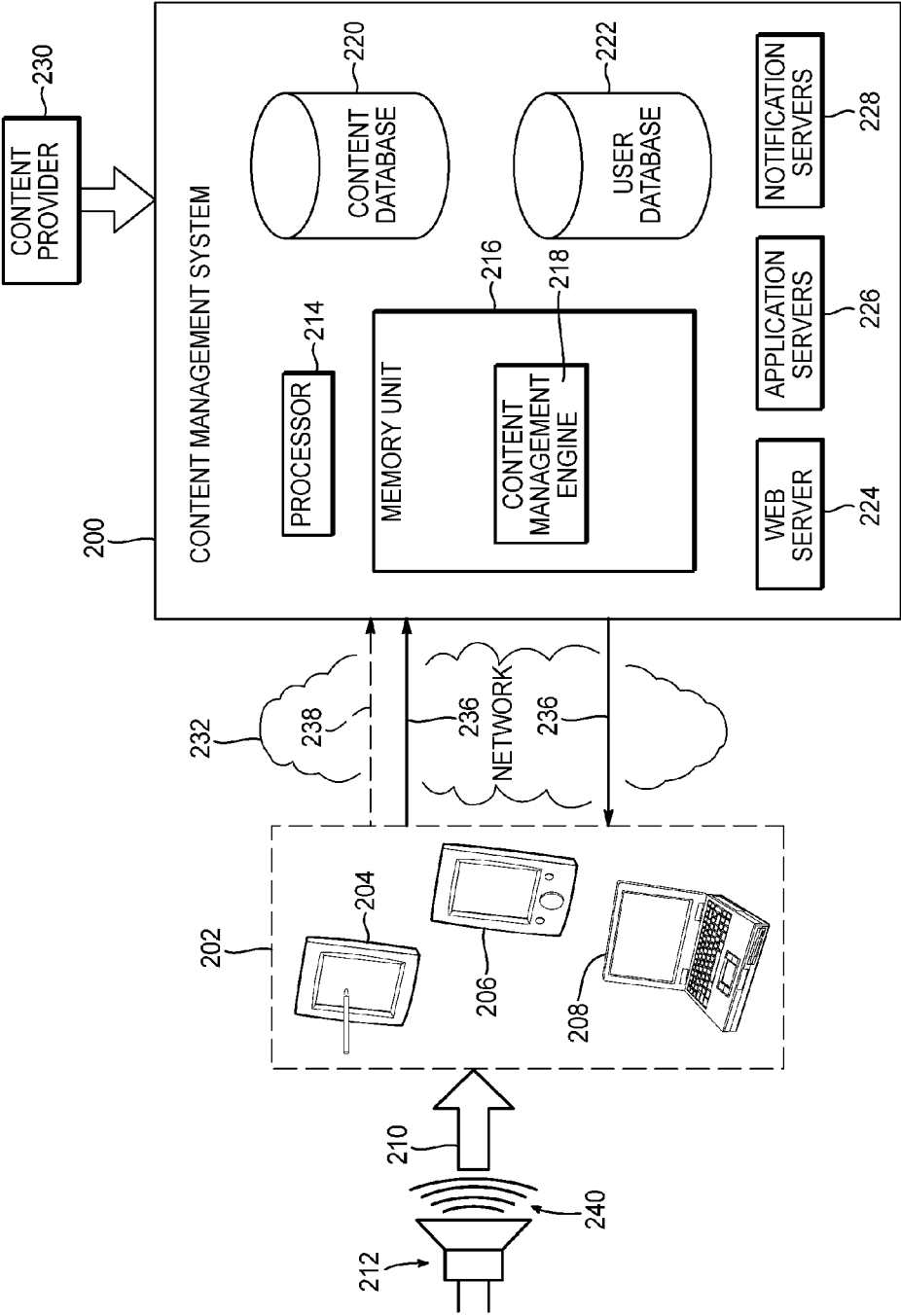


FIG. 1

		2.08 sec Beacon Iteration 1000							
Field	Size	Prefix 1002	Align 1004	Version 1006	CRC 1008	Data 1010	Source	Iteration 1014	Unused 1016
Purpose		4	4	4	8	16	4	8	4
		Static beacon to facilitation of location of transmission start	Static symbol sequence to enable temporal alignment	Encoding version identifier for future expansion	Error detecting code for symbols of 1004 through 1016 (40 symbols)	Content of transmission	Data source identifier	Transmission repetition sequence number	(Possible future applications)

FIG. 2A

	✓1020	✓1022	✓1024	✓1026	✓1028	✓1030	✓1032	✓1034
Frequency	18.7 kHz	18.8 kHz	18.9 kHz	19.0 kHz	19.1 kHz	19.2 kHz	19.3 kHz	19.4 kHz
Duration	40 msec	40 msec	40 msec	40 msec	40 msec	40 msec	40 msec	40 msec
Samples at 44.1 kHz	1764	1764	1764	1764	1764	1764	1764	1764
Symbol (2 bit encoding)	00	01	10	11	<unused>	<unused>	<unused>	<unused>
Symbol (3 bit encoding)	000	001	010	011	100	101	110	111

FIG. 2B

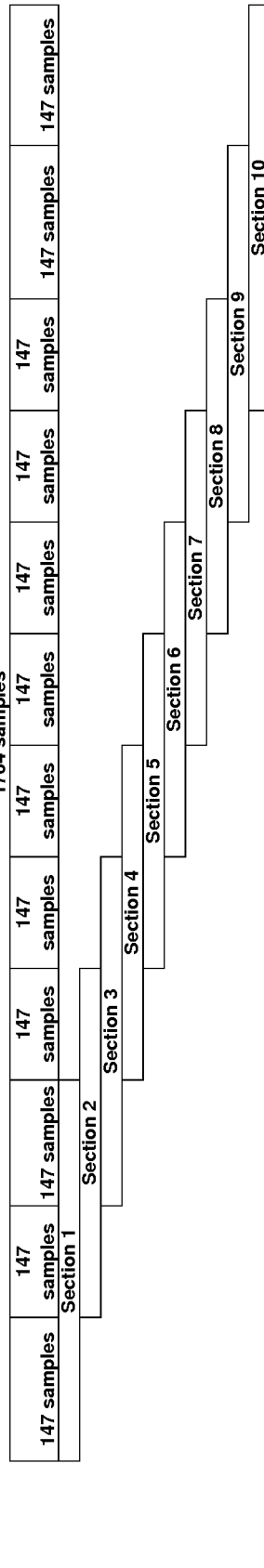
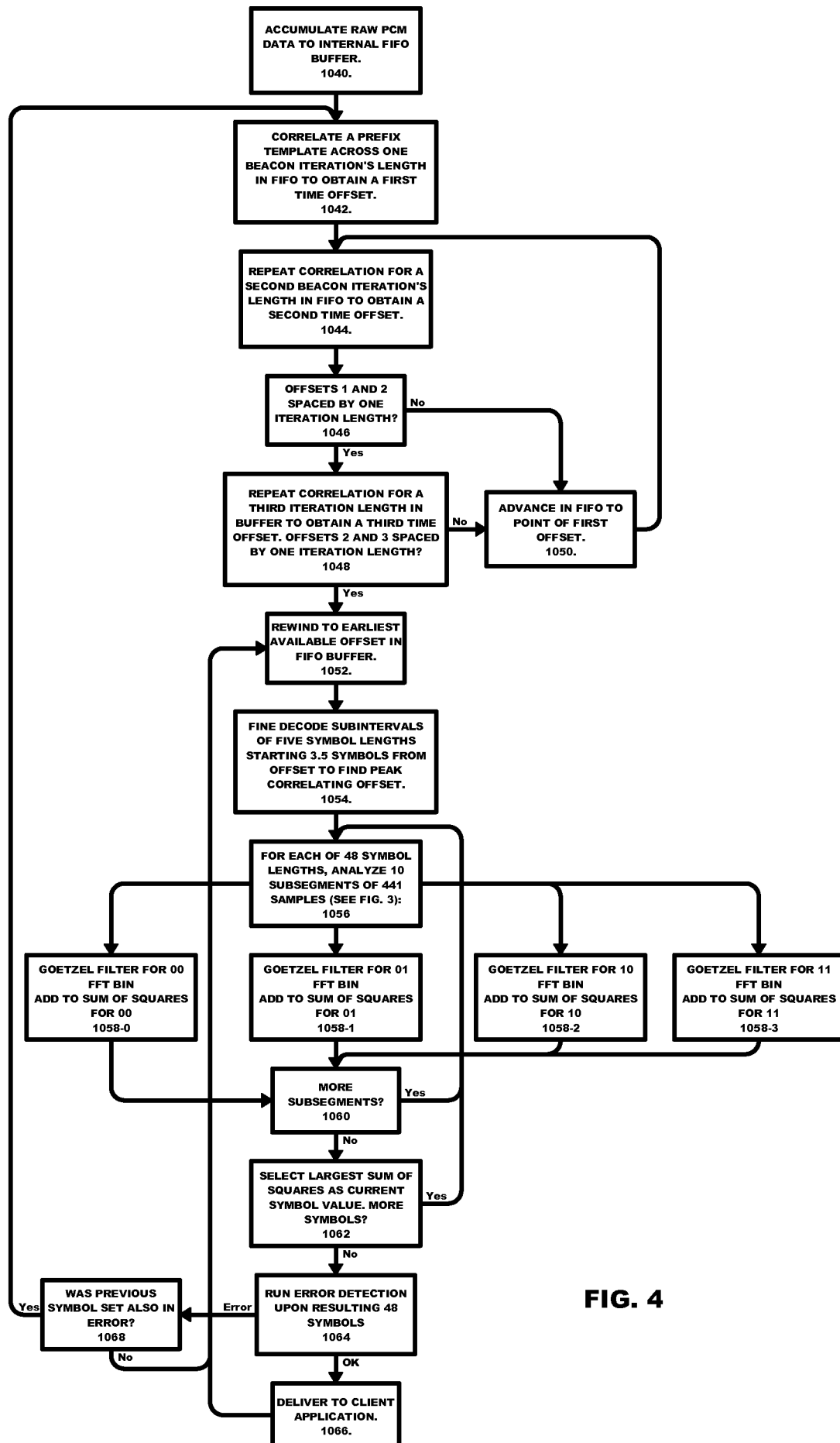


FIG. 3



Variable Length Beacon 2000				
Field	Prefix 2002	Header Version 2006	Header Length 2008	Header CRC 2009
Size (symbols)	6 symbols	6 symbols	6 symbols	6 symbols
Purpose	Static beacon to facilitation location of transmission start	Encoding version identifier for future expansion	Length of Beacon (bytes of payload 1 to 255)	CRC rate 2/3 encoding of version and length data
				6 - 1530 symbols (1-255 bytes)
				Content of transmission plus redundancy coding

Fig. 5

		✓2020	✓2022	✓2024	✓2026	✓2028	✓2030
Frequency		18.7 kHz	18.8 kHz	18.9 kHz	19.0 kHz	19.1 kHz	19.2 kHz
Duration		36 $\frac{2}{3}$ msec	36 $\frac{2}{3}$ msec	36 $\frac{2}{3}$ msec	36 $\frac{2}{3}$ msec	36 $\frac{2}{3}$ msec	36 $\frac{2}{3}$ msec
Samples at 44.1 kHz		1617	1617	1617	1617	1617	1617
Samples at 48 kHz		1760	1760	1760	1760	1760	1760
Symbol value (2 bit encoding)*		00	01	11	10	prefix_low	prefix_high

Fig. 6

220 msec 6 Symbol Prefix 2002					
Symbol	1	2	3	4	5
Symbol Value	prefix_high	prefix_high	prefix_high	prefix_low	prefix_low

Fig. 7A

1.32 Second 1 Byte Payload 2010a			
Field	CRC	Content	
Size (symbols)	12	4	2
Purpose	CRC of data	Data	ECC

Fig. 7B

2.42 Second 6 Byte Payload 2010b			
Field	CRC	Content	
Size (symbols)	12	24	12
Purpose	CRC of data	Data	ECC

Fig. 7C

8.14 Second 32 Byte Payload 2010c			
Field	CRC	Content	
Size (symbols)	12	128	64
Purpose	CRC of data	Data	ECC

Fig. 7D

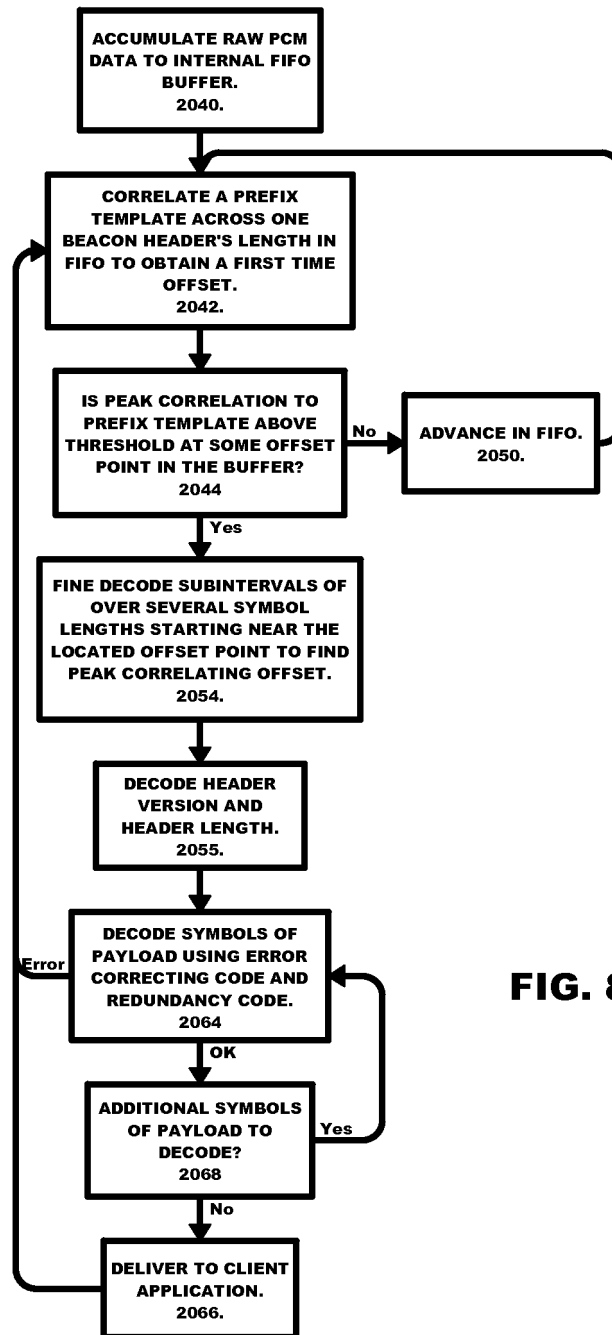


FIG. 8