
VIDEO SOURCE DEVICE
102
106
VIDEO SINK DEVICE
104

FIG. 1

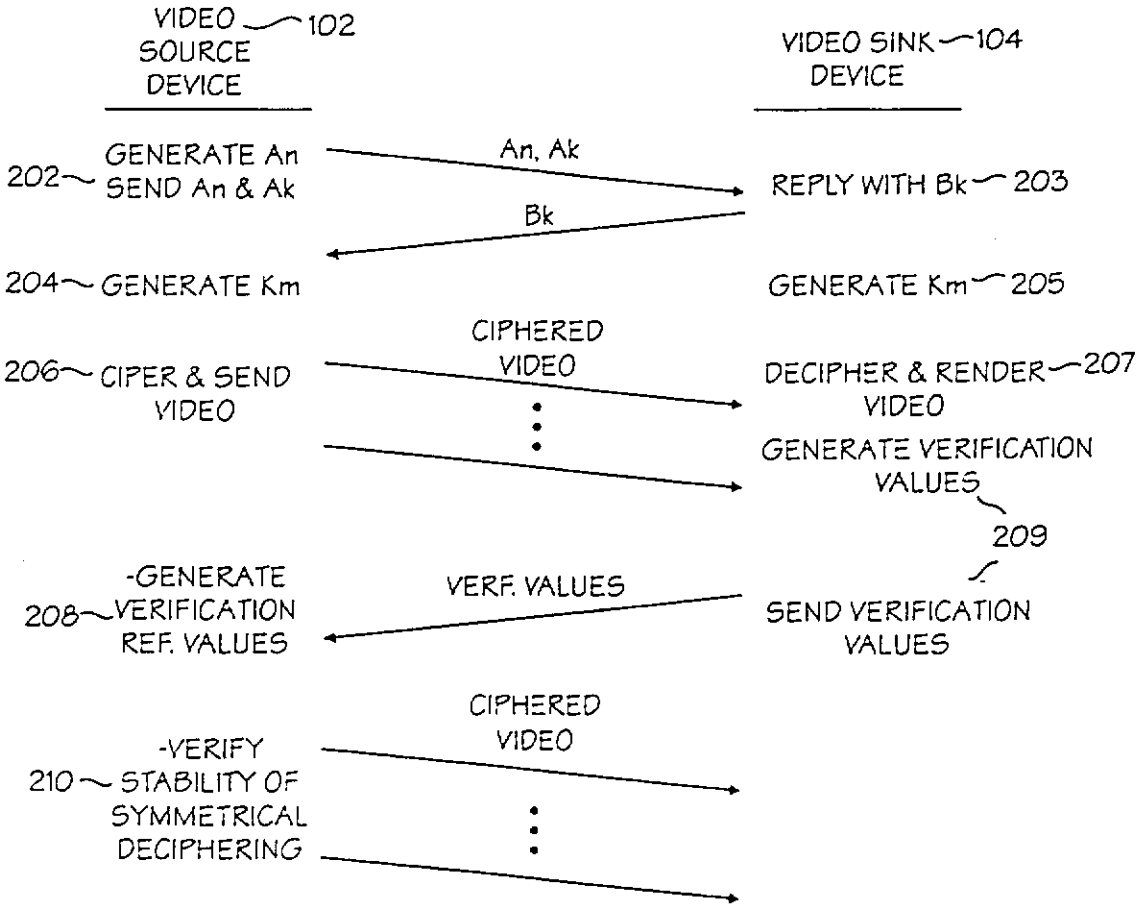

VIDEO SOURCE DEVICE 102
VIDEO SINK DEVICE 104
202 GENERATE An SEND An & Ak
An, Ak
REPLY WITH Bk 203
Bk
204 GENERATE Km
GENERATE Km 205
206 CIPER & SEND VIDEO
CIPHERED VIDEO
DECIPHER & RENDER VIDEO 207
GENERATE VERIFICATION VALUES
209
208 -GENERATE VERIFICATION REF. VALUES
VERF. VALUES
SEND VERIFICATION VALUES
CIPHERED VIDEO
210 -VERIFY STABILITY OF SYMMETRICAL DECIPHERING

FIG. 2

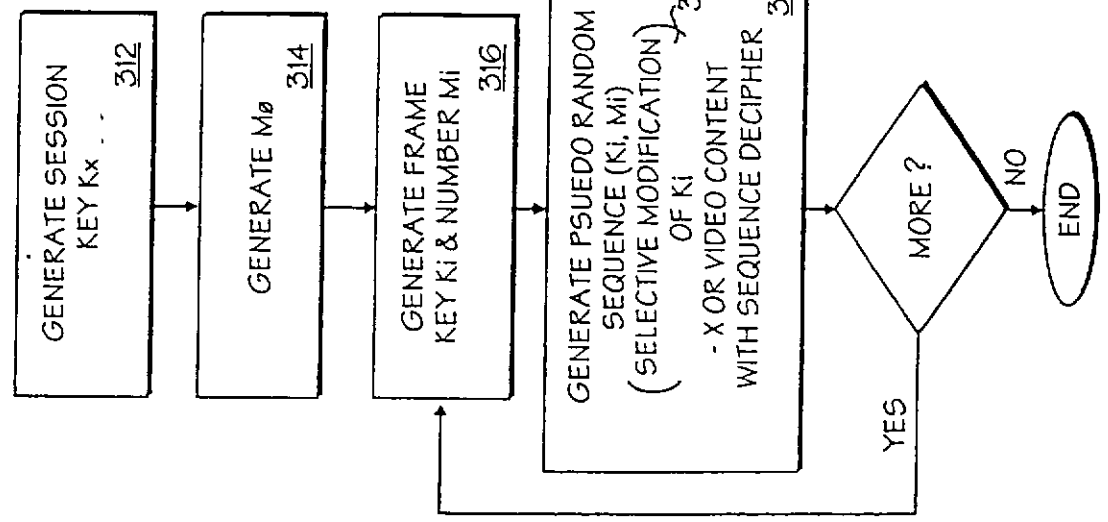

GENERATE SESSION KEY Kx
312
GENERATE Mø
314
GENERATE FRAME KEY Ki & NUMBER Mi
316
GENERATE PSUEDO RANDOM SEQUENCE (Ki, Mi) (SELECTIVE MODIFICATION OF Ki - X OR VIDEO CONTENT WITH SEQUENCE DECIPHER
318
320
MORE ?
YES
NO
END

Fig. 3b

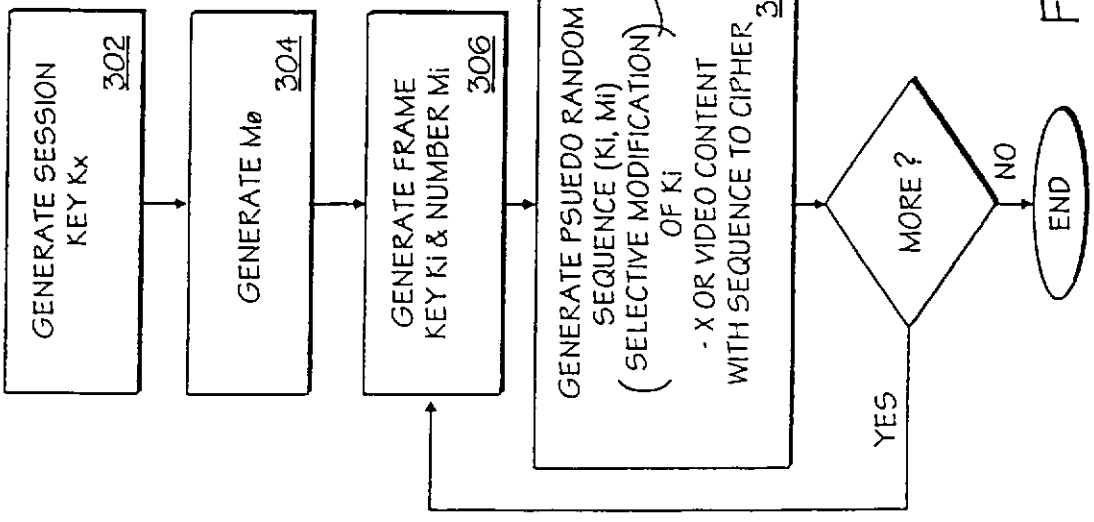

GENERATE SESSION KEY Kx
302
GENERATE Mø
304
GENERATE FRAME KEY Ki & NUMBER Mi
306
GENERATE PSUEDO RANDOM SEQUENCE (Ki, Mi) (SELECTIVE MODIFICATION OF Ki - X OR VIDEO CONTENT WITH SEQUENCE TO CIPHER
308
310
MORE ?
YES
NO
END

Fig. 3a

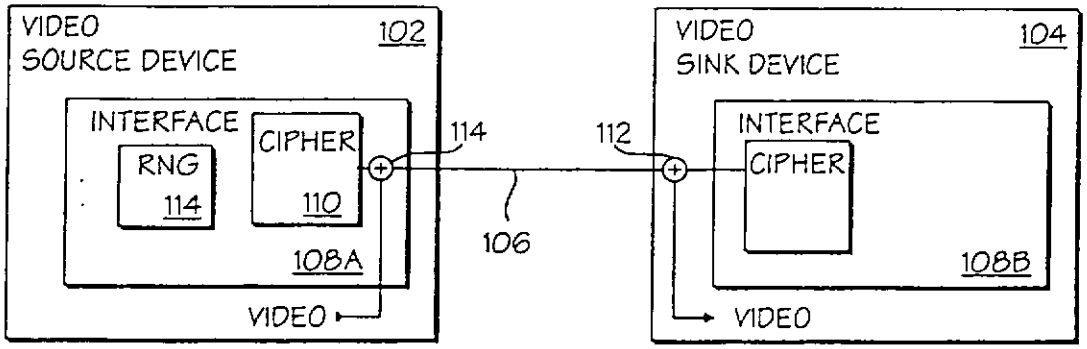

VIDEO
SOURCE DEVICE
102
INTERFACE
RNG
114
CIPHER
110
108A
VIDEO
114
112
106
VIDEO
SINK DEVICE
104
INTERFACE
CIPHER
108B
VIDEO

FIG. 4

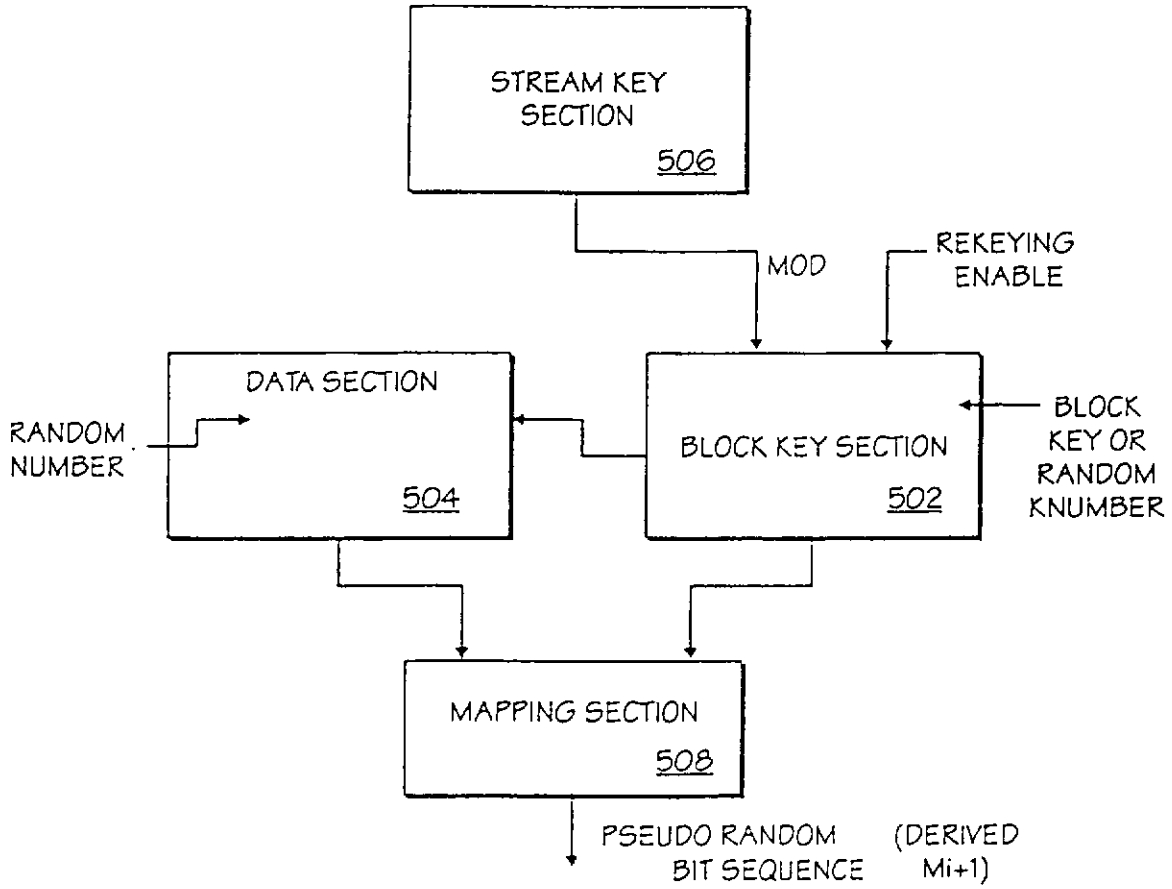

STREAM KEY
SECTION
506
MOD
REKEYING
ENABLE
DATA SECTION
504
RANDOM
NUMBER
BLOCK KEY SECTION
502
BLOCK
KEY OR
RANDOM
KNUMBER
MAPPING SECTION
508
PSEUDO RANDOM
BIT SEQUENCE
(DERIVED
Mi+1)

FIG. 5

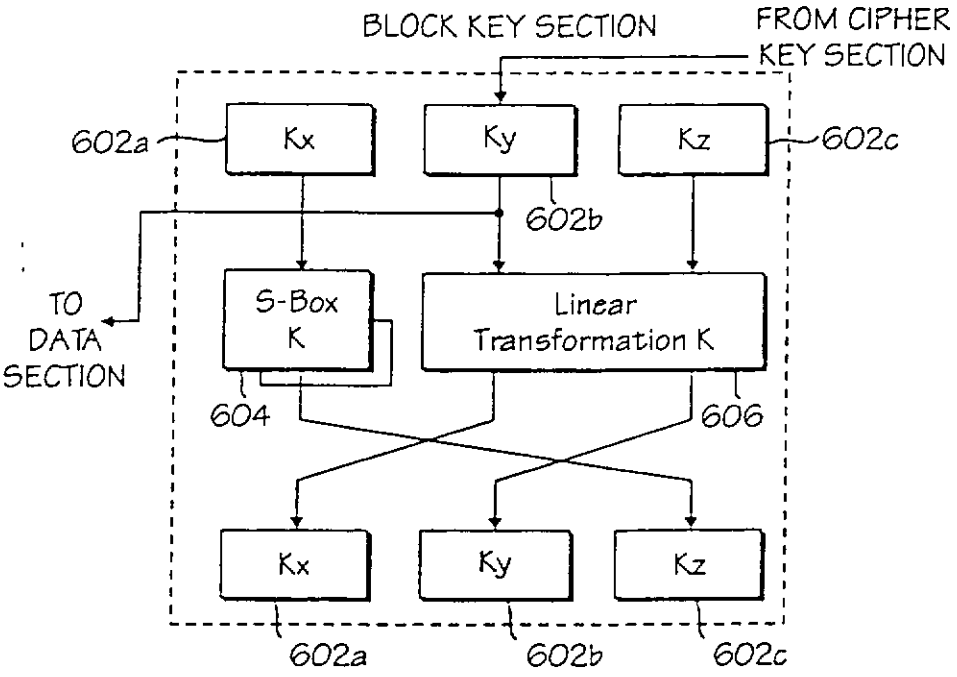

BLOCK KEY SECTION
FROM CIPHER KEY SECTION
602a
Kx
Ky
Kz
602c
602b
TO DATA SECTION
S-Box K
Linear Transformation K
604
606
Kx
Ky
Kz
602a
602b
602c

FIG. 6

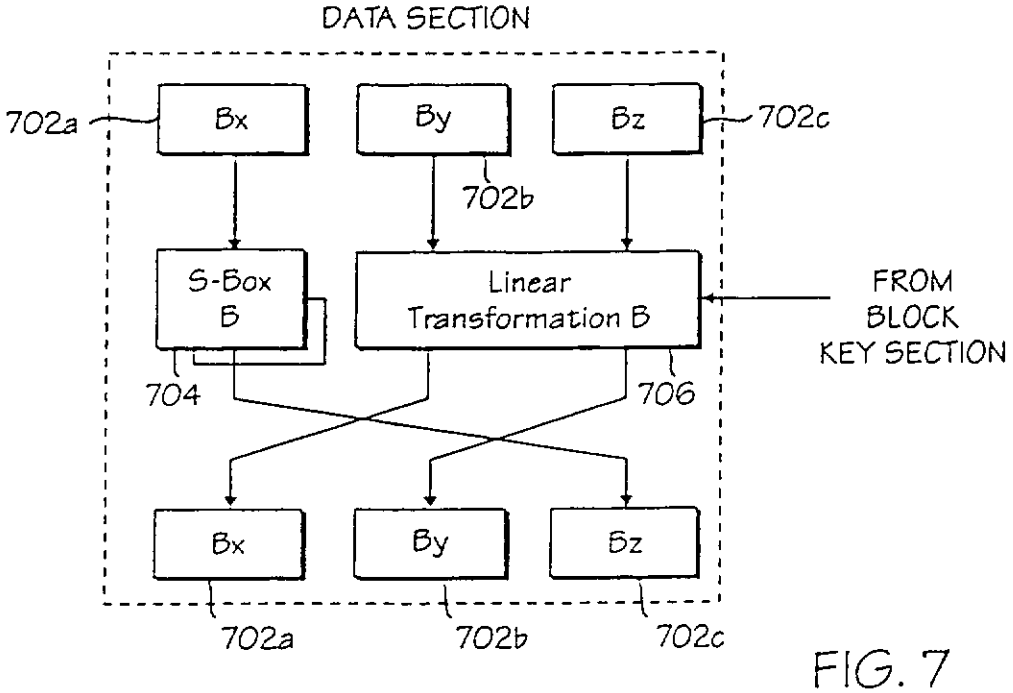

DATA SECTION
702a
Bx
By
Bz
702c
702b
S-Box B
Linear Transformation B
FROM BLOCK KEY SECTION
704
706
Bx
By
Bz
702a
702b
702c

FIG. 7

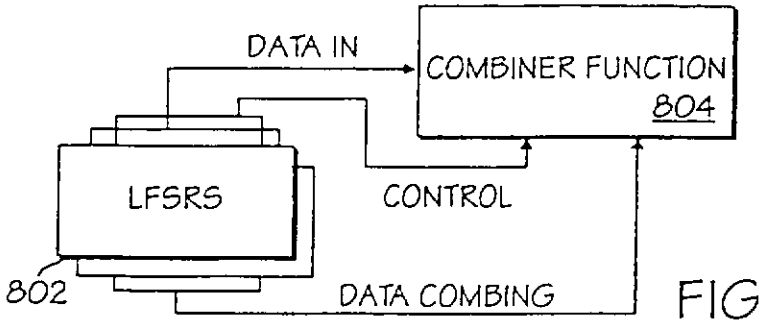


FIG. 8a

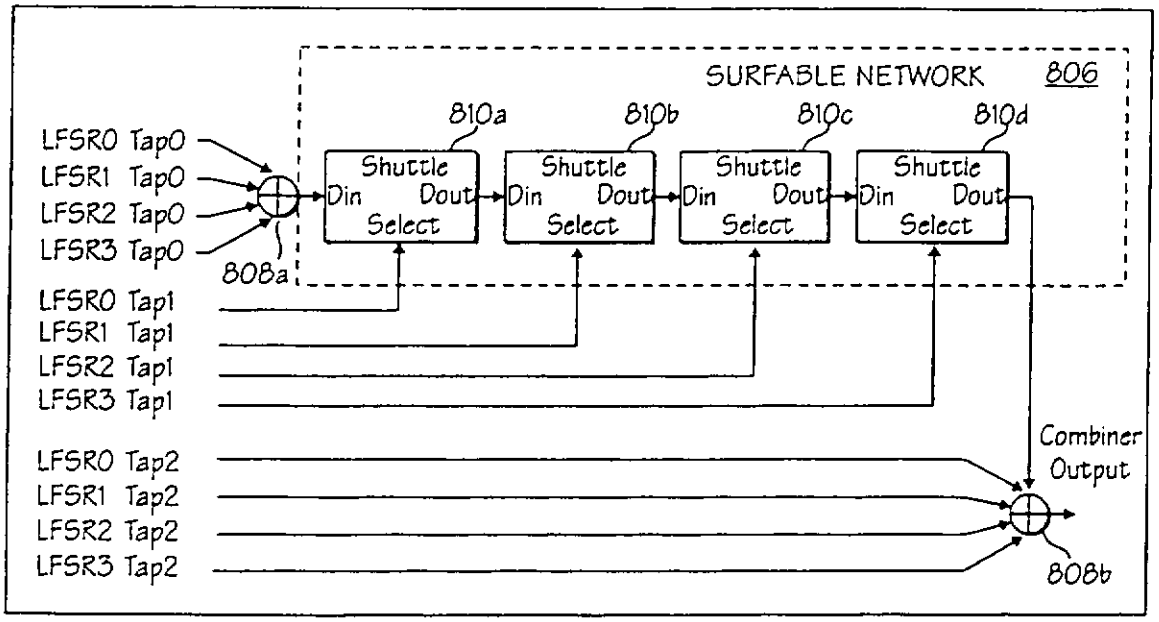


FIG. 8b

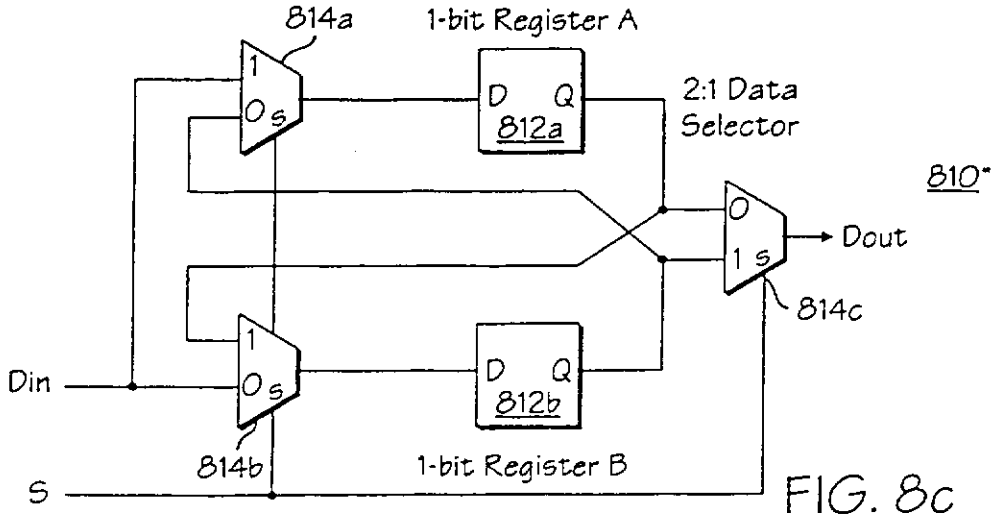


FIG. 8c