



(12) **United States Patent**
Epstein

(10) **Patent No.:** **US 6,993,134 B1**
(45) **Date of Patent:** **Jan. 31, 2006**

(54) **KEY EXCHANGE VIA A PORTABLE
REMOTE CONTROL DEVICE**

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Eindhoven (NL)

* cited by examiner

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

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Assistant Examiner—Paul E. Callahan

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(57) **ABSTRACT**

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The communications means that are commonly provided for
the remote control of electronic components are utilized to
effect an exchange of parameters to facilitate a crypto-
graphic key exchange. The bidirectional remote control
transceivers, typically infrared transceivers, that are com-
monly used to communicate commands from the remote
control device and to communicate feedback to the remote
control device are configured to communicate parameters
between a pair of consumer devices that are controllable by
the remote control device. In a preferred embodiment of this
invention the remote control device contains the control
means to effect the transfer of these parameters between the
consumer devices.

(51) **Int. Cl.**
H04L 9/00 (2006.01)

(52) **U.S. Cl.** **380/262**; 713/171; 705/66;
380/283; 380/285; 455/410; 455/352; 455/88;
348/14.05

(58) **Field of Classification Search** 455/88,
455/352, 410; 348/14.05; 713/171; 705/66;
380/262, 283-285

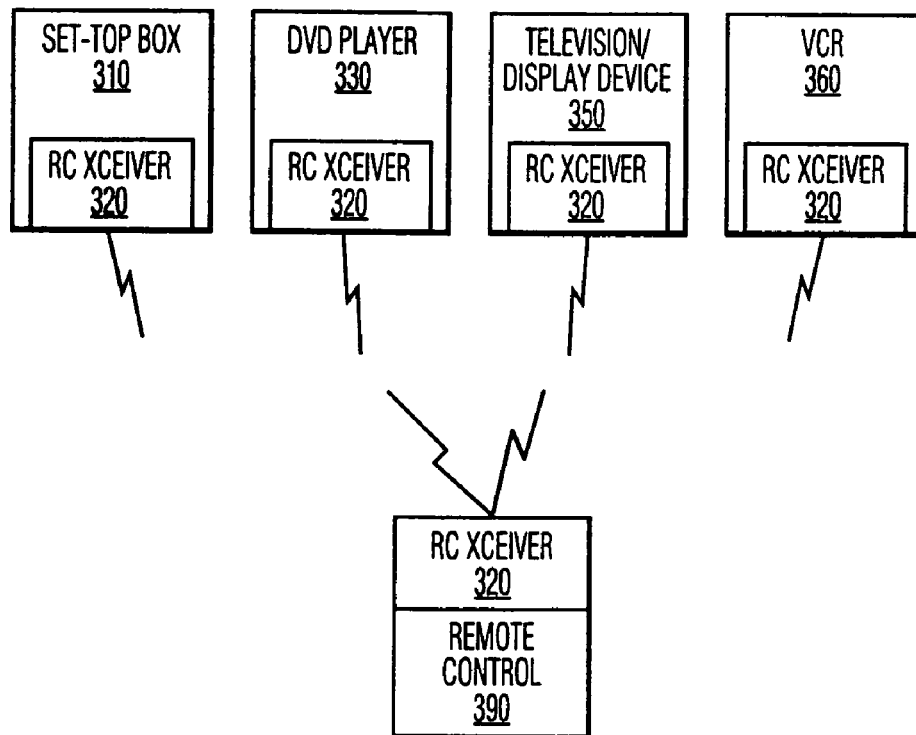
See application file for complete search history.

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8 Claims, 4 Drawing Sheets



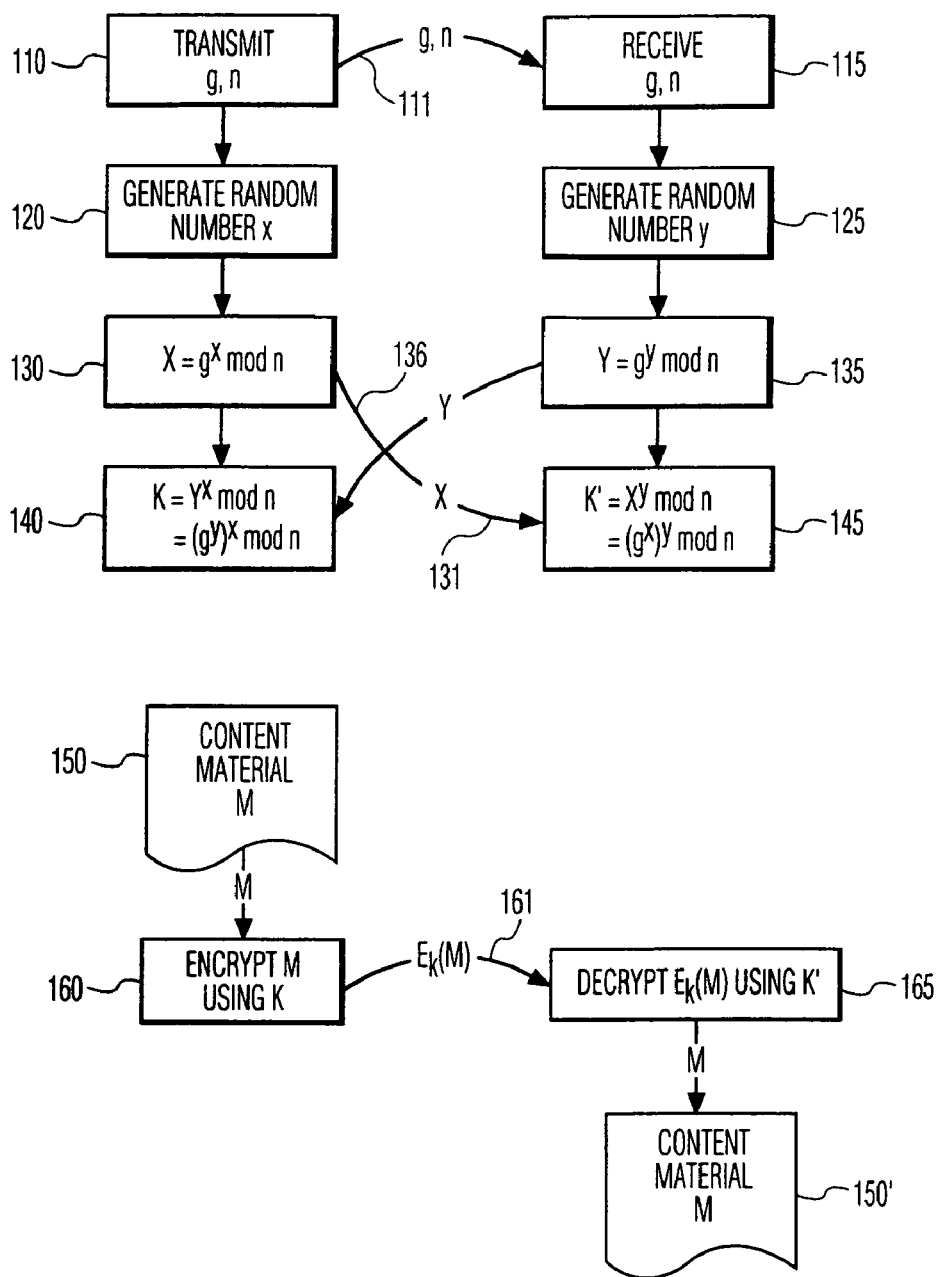


FIG. 1
PRIOR ART

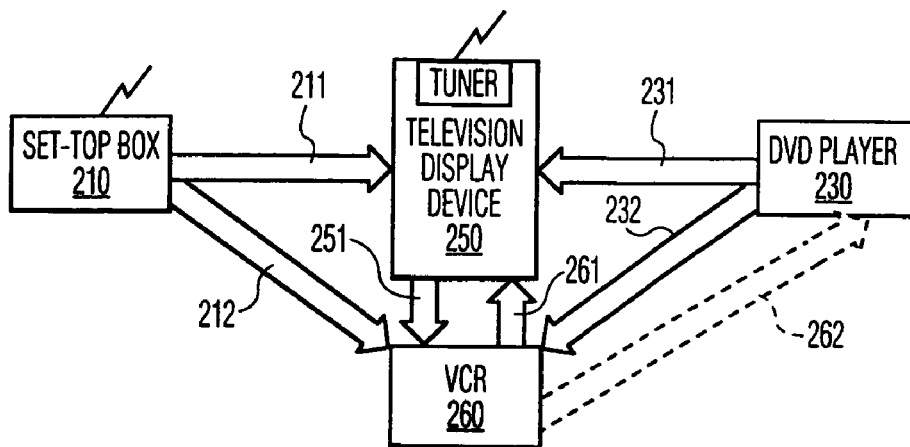


FIG. 2
PRIOR ART

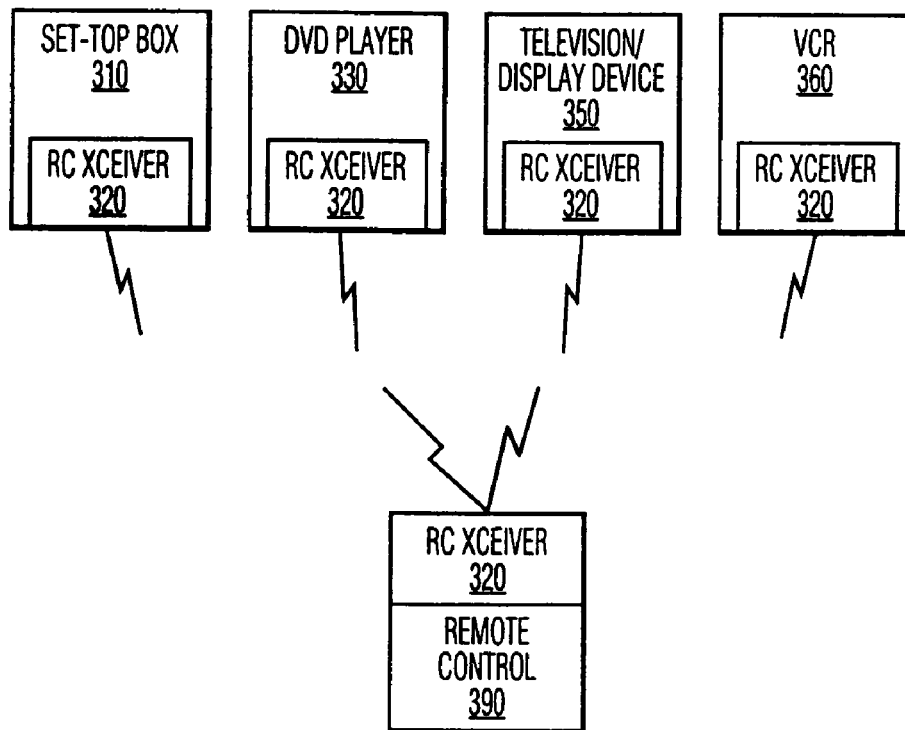


FIG. 3

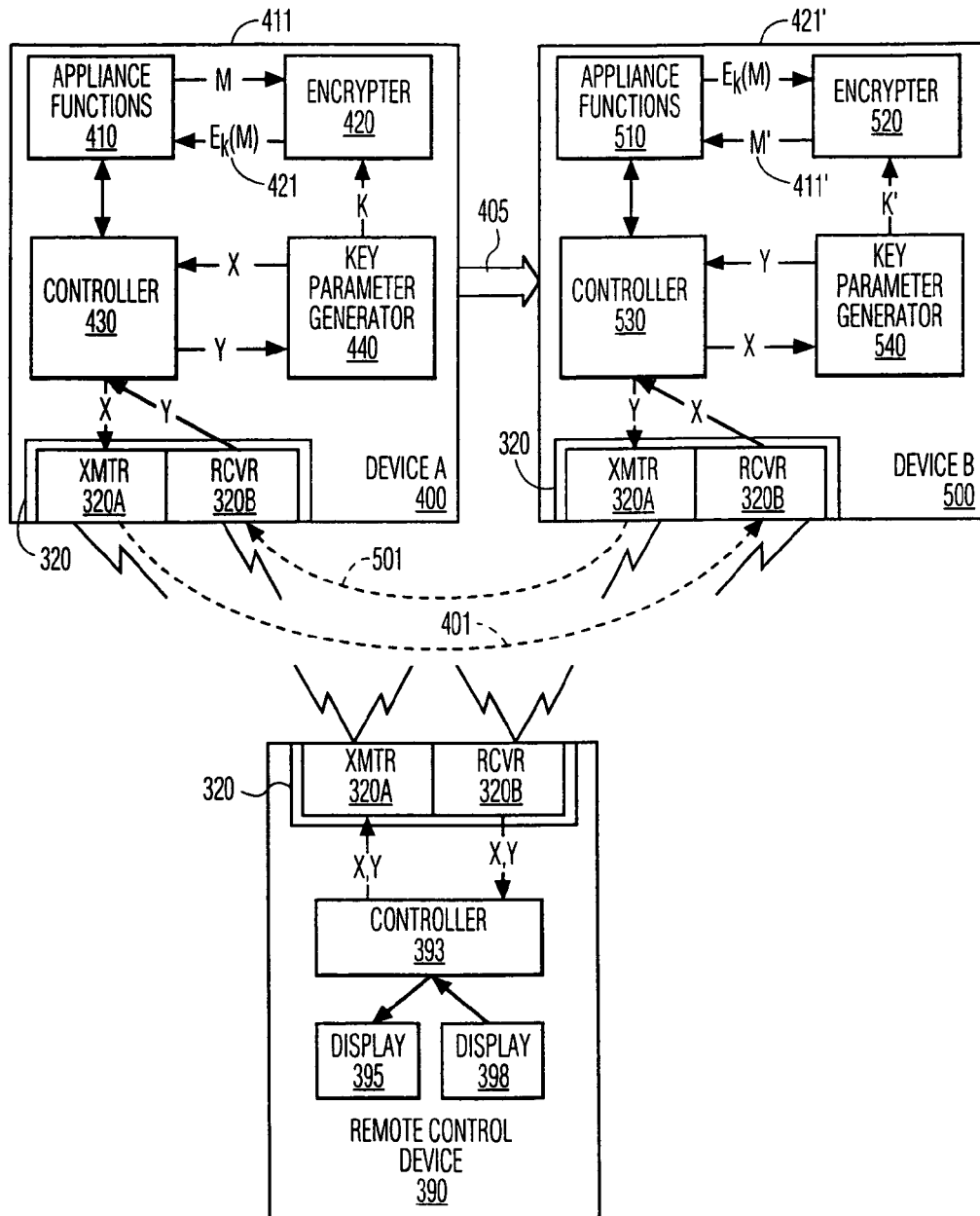


FIG. 4

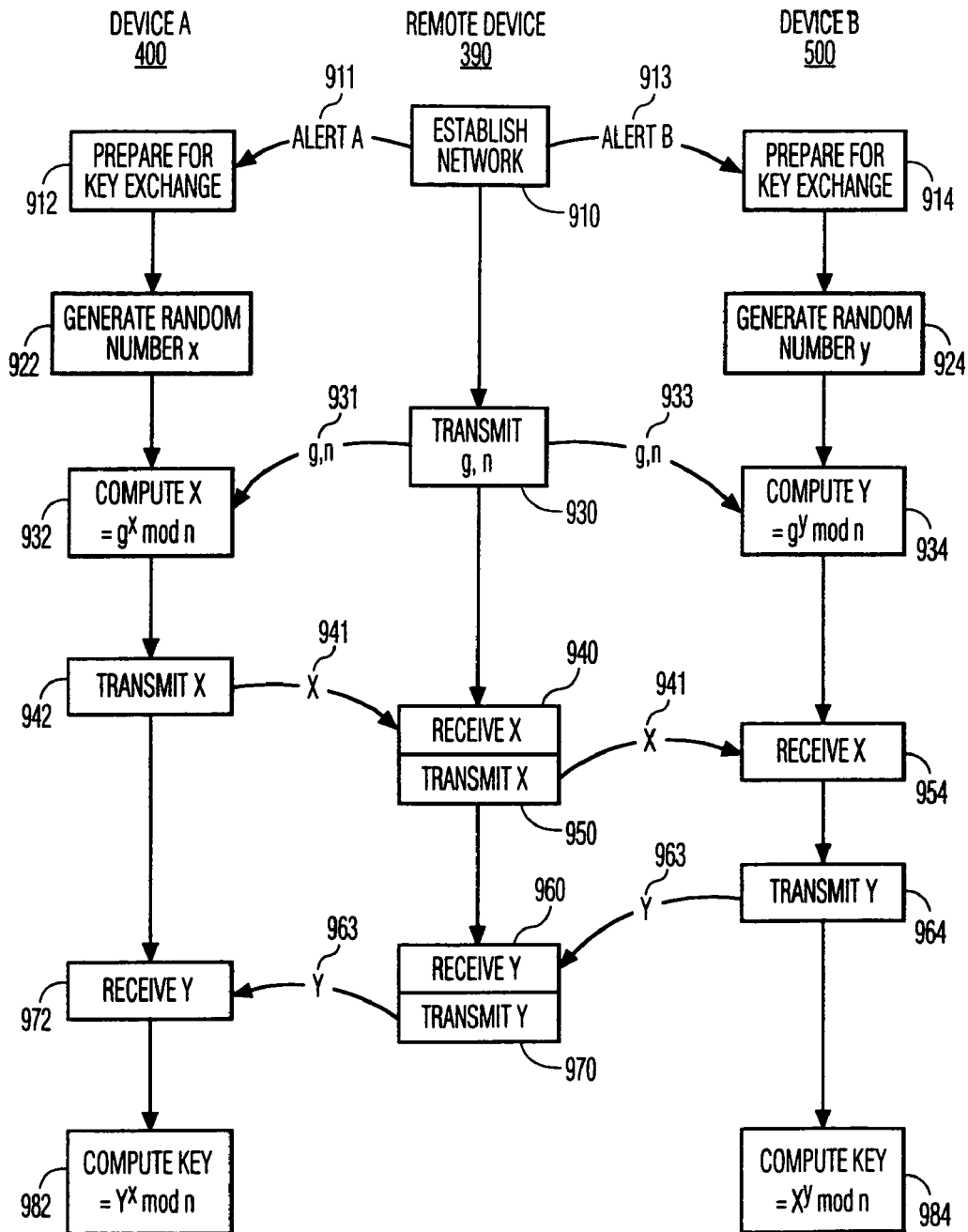


FIG. 5

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