United States Patent [19]

Aminetzah

[11] **4,388,643**

[45] **Jun. 14, 1983**

[54] **METHOD OF CONTROLLING SCRAMBLING AND UNSCRAMBLING IN A PAY TV SYSTEM**

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[73] Assignee: **Northern Telecom Limited**, Montreal, Canada

[21] Appl. No.: **251,085**

[22] Filed: **Apr. 6, 1981**

[51] **Int. Cl.**[3] **H04N 7/16**; H04L 9/00

[52] **U.S. Cl.** **358/123**; 178/22.08; 178/22.13; 358/114; 358/117; 358/122

[58] **Field of Search** 178/22.08, 22.09, 22.13, 178/22.16, 22.17; 358/114, 117, 122, 123

[56] **References Cited**

U.S. PATENT DOCUMENTS

3,906,460	9/1975	Halpern	178/22.08
4,068,264	1/1978	Pires	358/122
4,081,832	3/1978	Sherman	358/124
4,115,807	9/1978	Pires	358/124
4,163,254	7/1979	Block et al.	358/122
4,238,854	12/1980	Ehrsam et al.	178/22.16
4,292,650	9/1981	Hendrickson	358/122
4,323,921	4/1982	Guillou	358/114
4,337,483	6/1982	Guillou	358/114

FOREIGN PATENT DOCUMENTS

2068691	8/1981	United Kingdom	178/22.05

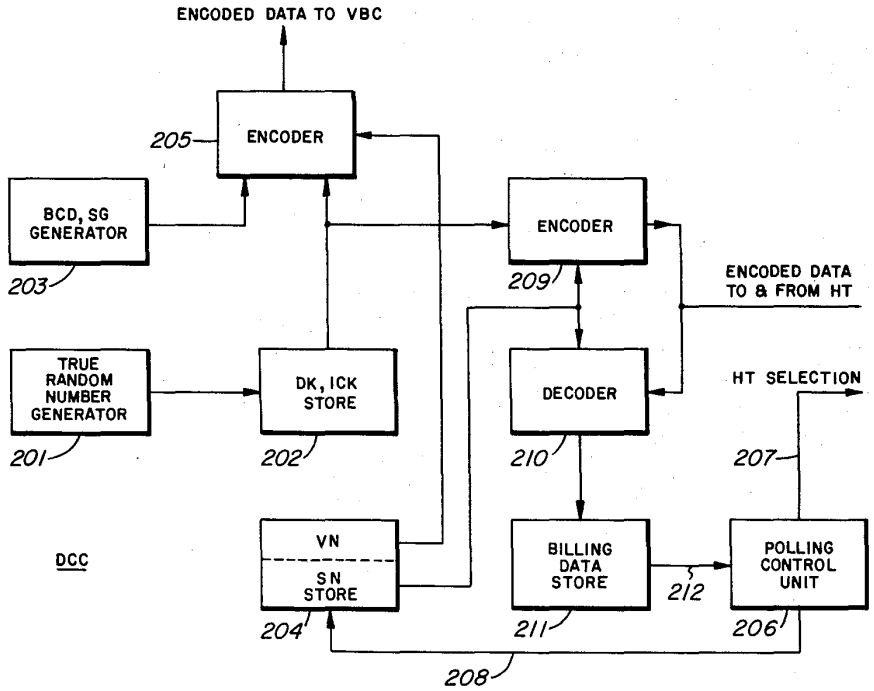
Primary Examiner—S. C. Buczinski

Attorney, Agent, or Firm—R. John Haley

[57] **ABSTRACT**

Scrambling of a video signal in a pay TV system is effected in dependence upon a first variable which is changed recurrently, e.g. monthly, and a second variable which changes from field to field. For each field the second variable and other data are transmitted simultaneously with the video signal together with check data produced from the transmitted data and a third variable which is changed recurrently. The first and third variables are recurrently transmitted to each authorized subscriber station, encoded in dependence upon a subscriber number stored in the subscriber station. In the subscriber station, unscrambling is effected in dependence upon the stored first variable and the transmitted second variable after the transmitted data is checked using the check data and the stored third variable. The first variable is conveniently different for different types of television programs, the type of television program being identified by the other data transmitted simultaneously with the video signal.

11 Claims, 4 Drawing Figures



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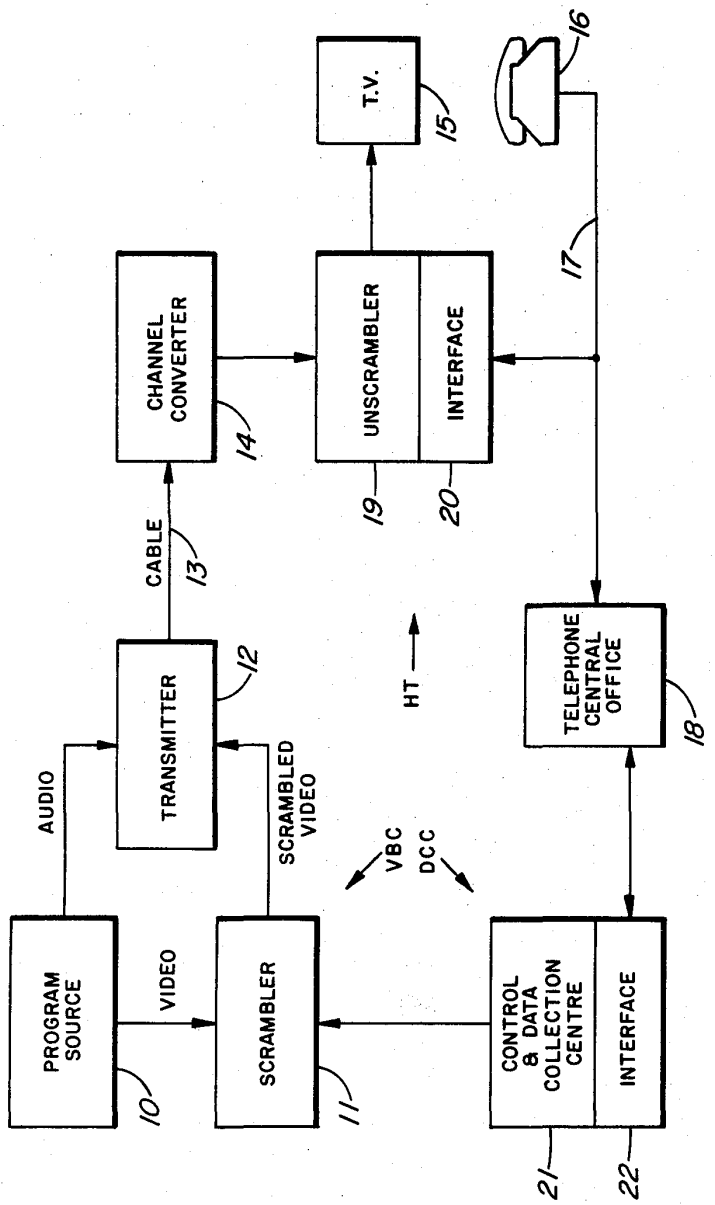

FIG. 1

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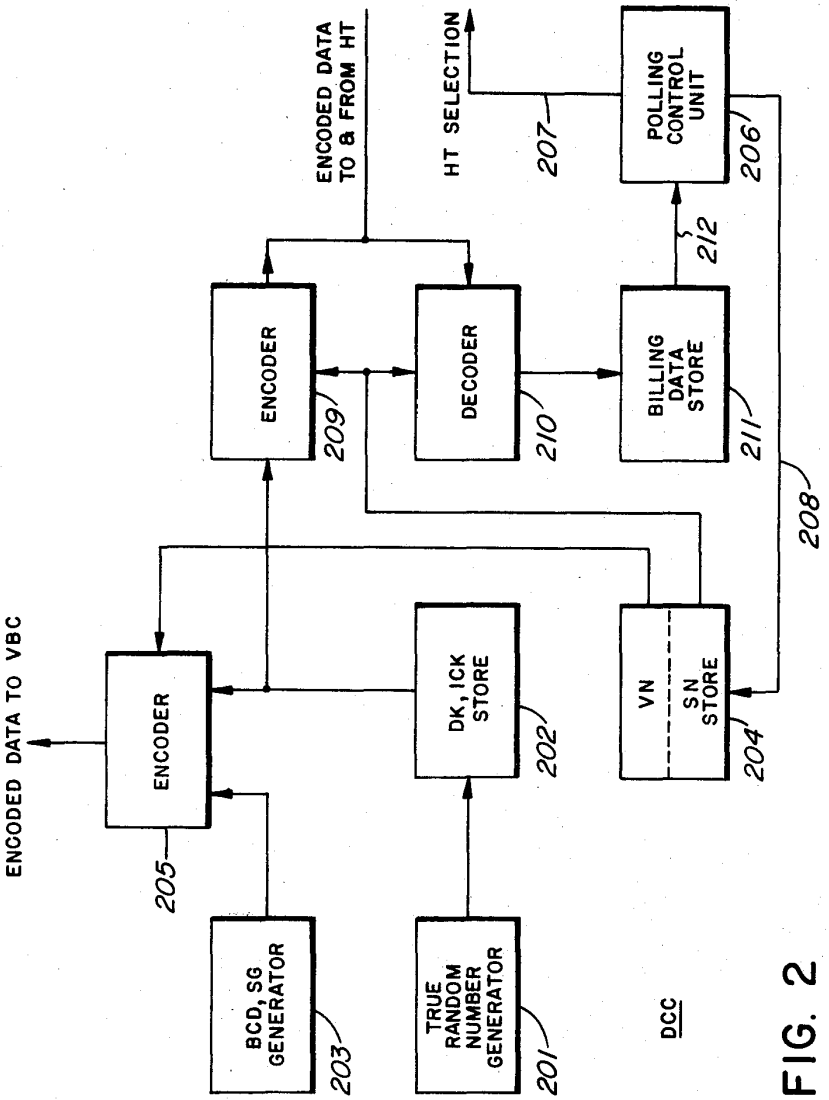

FIG. 2

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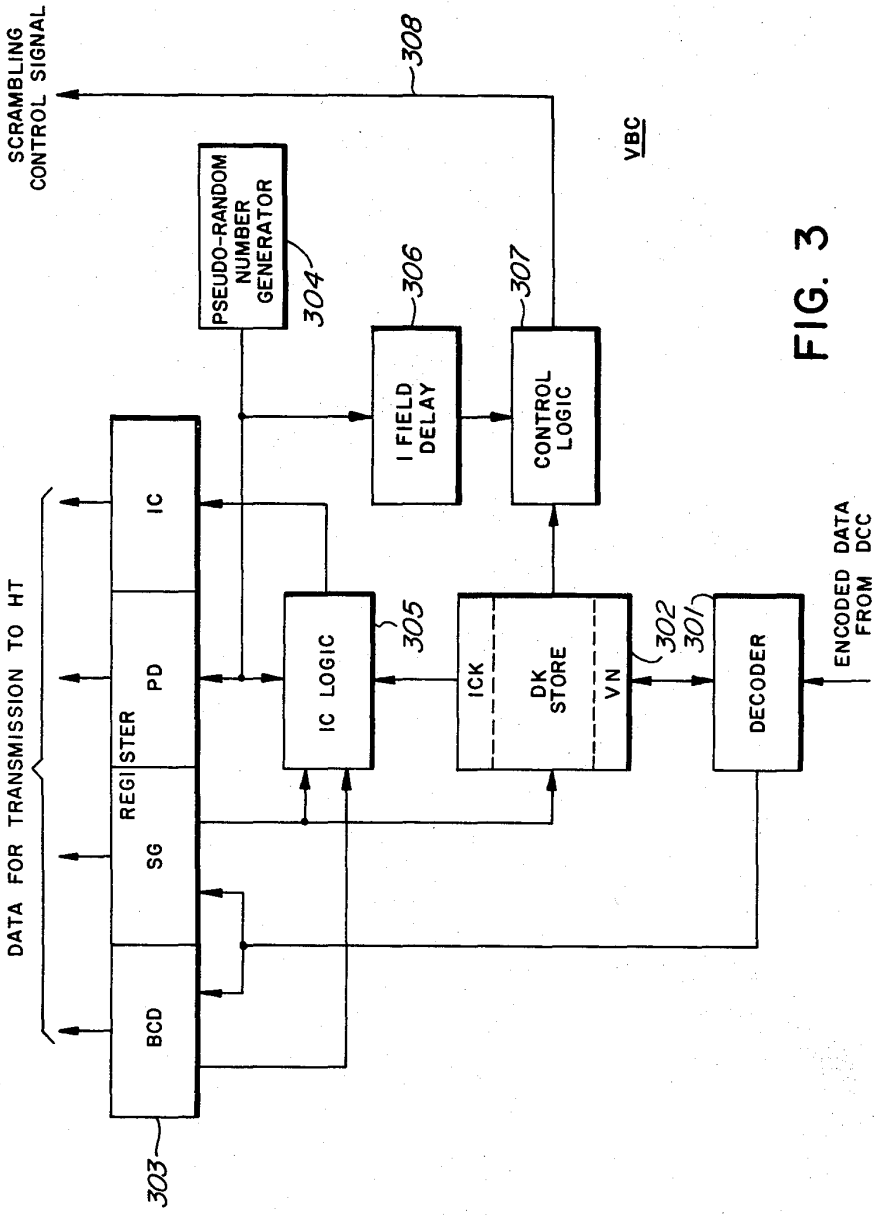

FIG. 3

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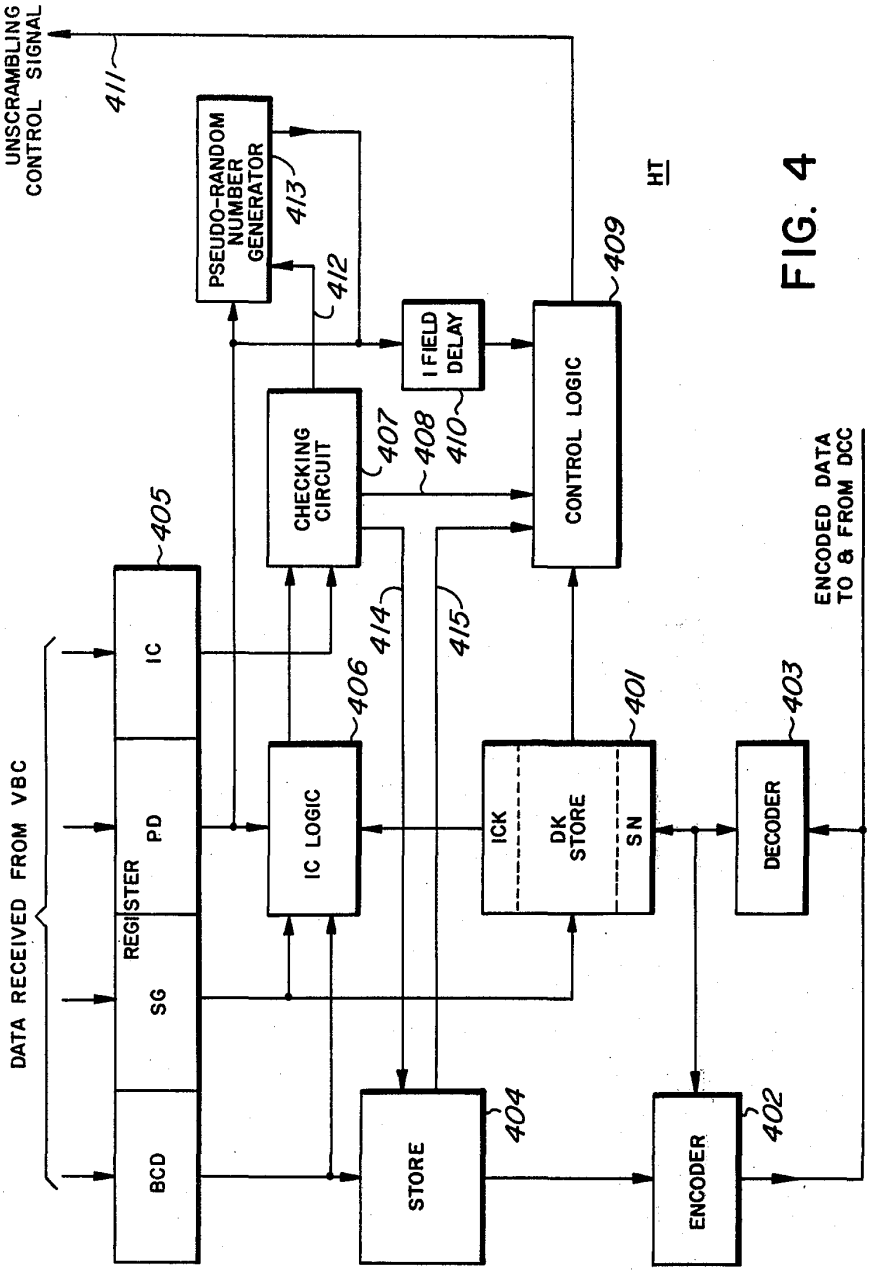

FIG. 4

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