



- [54] **PRESENCE AND DATA LABELS**
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Australia
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Australia
- [21] Appl. No.: **09/214,313**
- [22] PCT Filed: **Jul. 4, 1997**
- [86] PCT No.: **PCT/AU97/00428**
§ 371 Date: **Jan. 4, 1999**
§ 102(e) Date: **Jan. 4, 1999**
- [87] PCT Pub. No.: **WO98/01837**
PCT Pub. Date: **Jan. 15, 1998**
- [30] **Foreign Application Priority Data**
Jul. 5, 1996 [AU] Australia PO 0855
- [51] **Int. Cl.⁷** **G08B 13/14**
- [52] **U.S. Cl.** **340/572.1; 340/10.4; 340/10.42**
- [58] **Field of Search** **340/572.1, 572.2, 340/572.7, 10.4, 10.42, 825.37, 572.5**

5,099,225	3/1992	Narlow et al.	340/572.1
5,218,189	6/1993	Hutchison	340/10.4
5,477,210	12/1995	Belcher	340/572.1
5,604,486	2/1997	Lauro et al.	340/10.42
5,721,535	2/1998	Ikefuji	340/10.4

FOREIGN PATENT DOCUMENTS

45523/96	8/1996	Australia .
0 324 564	7/1989	European Pat. Off. .
90/09707	8/1990	WIPO .

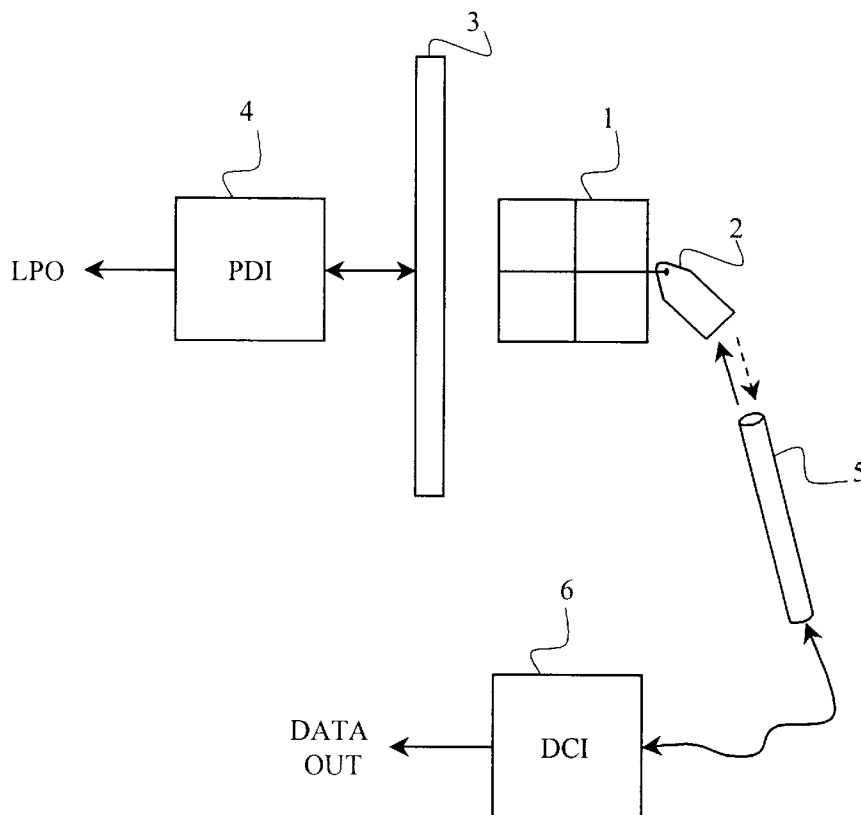
Primary Examiner—Daniel J. Wu
Assistant Examiner—John Tweel, Jr.
Attorney, Agent, or Firm—Larson & Taylor, PLC

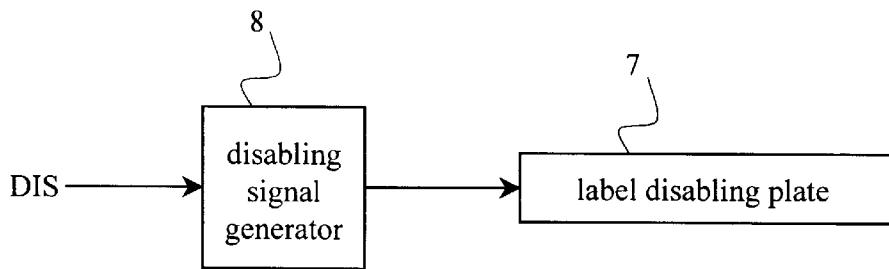
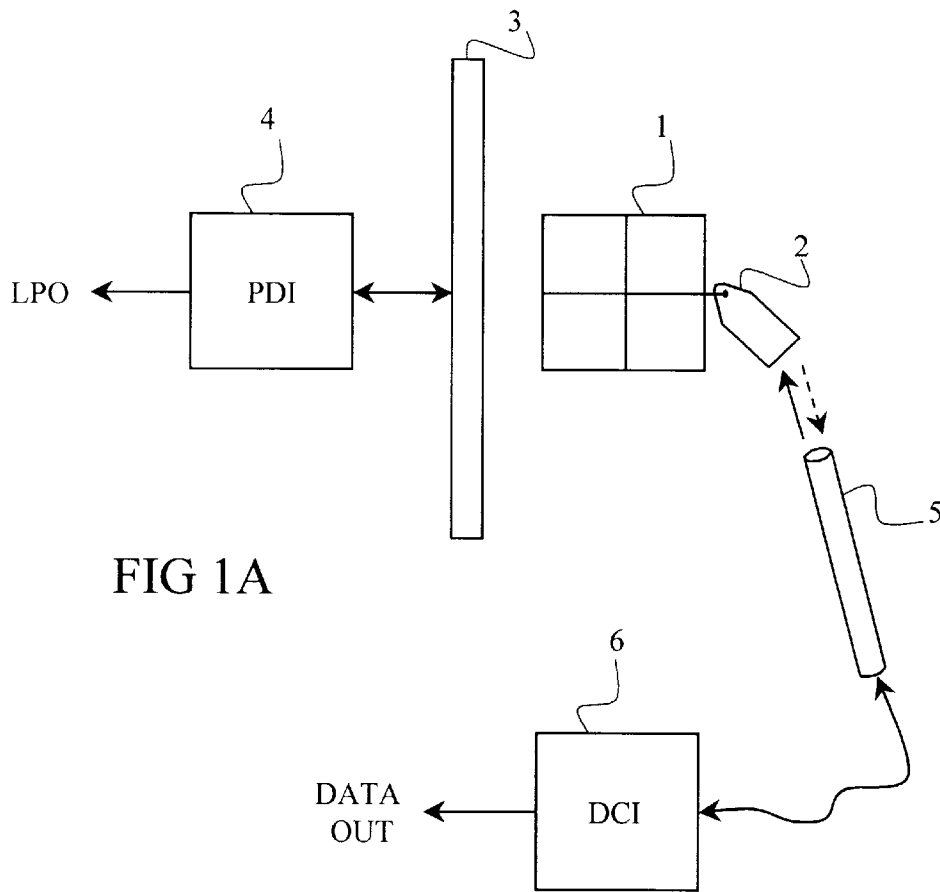
[57] **ABSTRACT**

A system for detecting presence of and for communicating with an electronic coded label. The coded label includes a presence signaling antenna, a label circuit and a data communications antenna. The system includes presence detection means for creating a presence detection electromagnetic field and data communications means for creating an interrogation electromagnetic field. The label circuit is adapted to operate in a first mode when the electromagnetic field to which the label is exposed is at a first power level, said first mode being that of a linear circuit with an impedance dependent upon frequency. The label circuit is adapted to operate in a second mode when the electromagnetic field to which the label is exposed is at a second power level, said second mode being that of a non-linear circuit with behavior dependent upon time.

52 Claims, 11 Drawing Sheets

- [56] **References Cited**
- U.S. PATENT DOCUMENTS**
- 3,755,803 8/1973 Cole et al. 340/572.1
- 3,990,065 11/1976 Purinton et al. 340/572.1





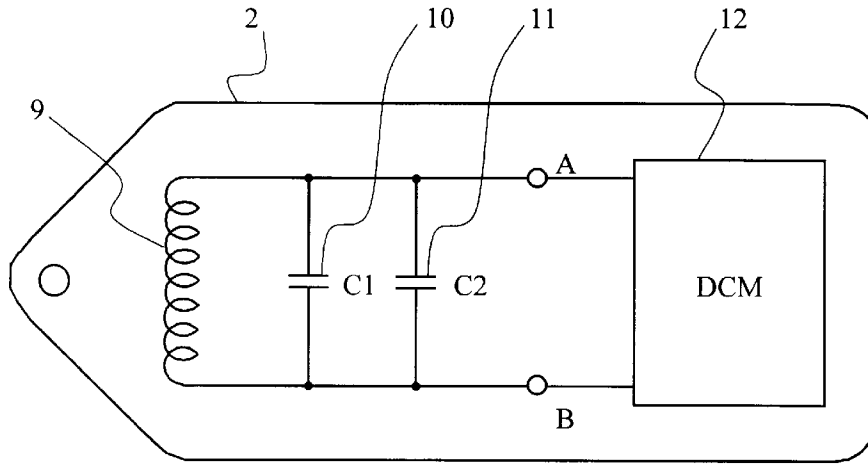


FIG 2

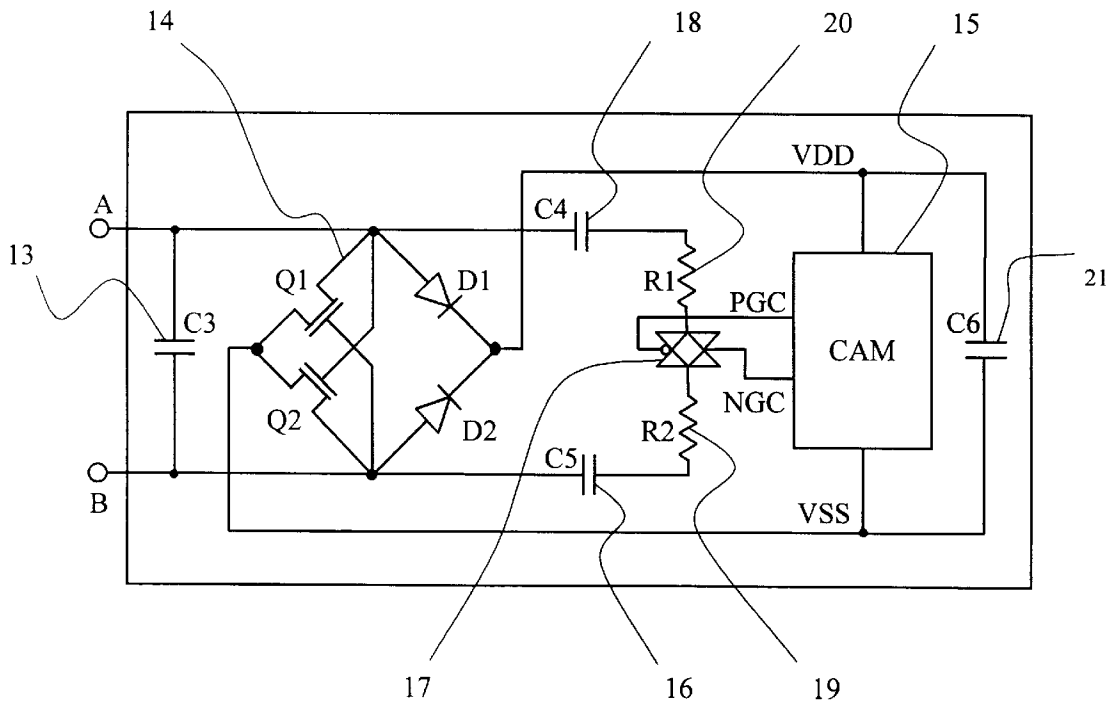


FIG 3

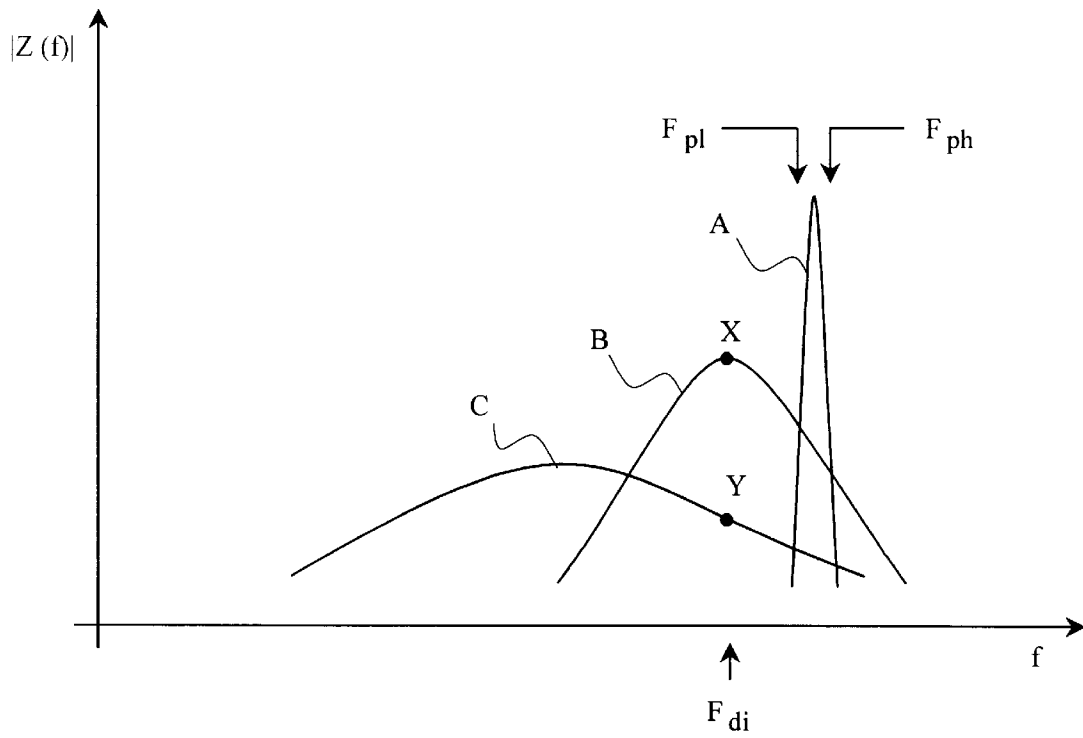


FIG 4

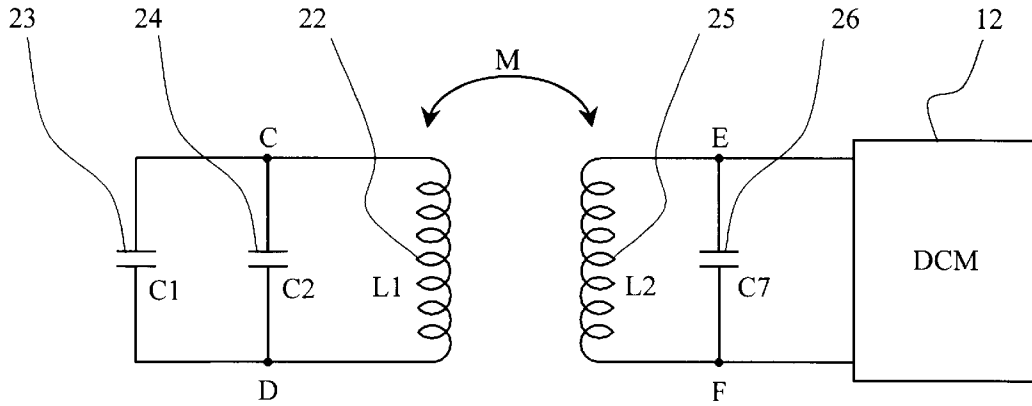


FIG 5

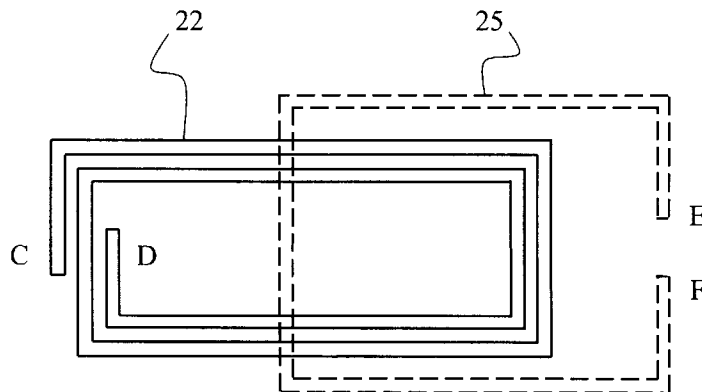


FIG 6

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