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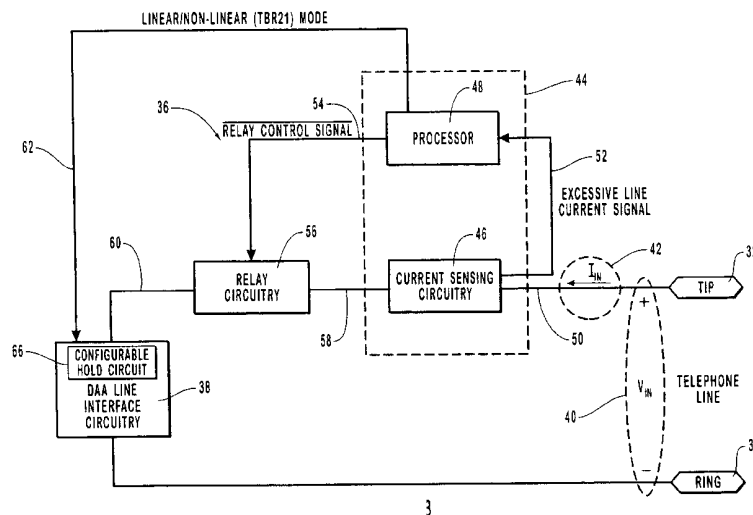
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) **Title:** LINE CURRENT PROTECTION CIRCUIT AND METHOD FOR LINEAR AND NONLINEAR HOLD CIRCUIT



(57) **Abstract:** A novel line-current protection circuit (44) for detecting excessive line current (42) from a telephone line and protecting line interface circuitry from the excessive line current (42) is presented. The protection circuit (44) is adapted to detect when an excessive current is present on the tip (32) and ring (34) lines indicative of the misconnection of the modem or other line interface device with a telephone network that presents an incompatible interface standard. The preferred embodiment appreciates the multi-mode hold current specifications throughout the world and evaluates the connection of the line interface circuit (38) with a telephone line to determine the compatibility therewith. When excessive line current (42) is detected, the line-protection circuit (44) switches the vulnerable line interface out of the circuit. When compatible line current levels are detected, the present invention reconfigures the configurable hold circuit (66) into its original operating (e.g., non-testing) state for call processing.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
 IPC(7) : H04M 1/00
 US CL : 379/412,399
 According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
 Minimum documentation searched (classification system followed by classification symbols)
 U.S. : 379/412,399,407,413

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y,E	US 6,201,865 B1 (DUPUIS et al.) 13 March 2001 (13.03.2001), figures 5a, 5b, 5c and 5d, column 8, line 42-col. 9, line 53.	1-18
Y	US 5,777,836 A (PRICE et al.) 07 July 1998 (07.07.1998), abstract.	1,4-7,9-11,14-16
Y,P	US 6,188,764 B1 (HUANG et al.) 13 February 2001 (13.02.2001), fig. 2, col. 6, lines 5-18.	1,9,14
Y,P	US 6,088,446 A (HUANG) 11 July 2000 (11.07.2000), figure 2.	1,9,14
A	US 5,912,513 A (HOLLENBACH et al.) 15 June 1999 (15.06.1999), all.	1-18
A	US 5,696,660 A (PRICE) 09 December 1997 (09.12.1997), all.	1-18

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"O" document referring to an oral disclosure, use, exhibition or other means	"&"	document member of the same patent family
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