

United States Patent [19]
Cunningham et al.

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[54] WIDE AREA REMOTE TELEMETRY
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[21] Appl. No.: 09/152,010

[22] Filed: Sep. 11, 1998

Related U.S. Application Data

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provisional application No. 60/094,057, Jul. 24, 1998.

[51] Int. Cl.⁷ G08B 23/00

[52] U.S. Cl. 340/870.02; 340/870.19

[58] Field of Search 340/870.02, 870.07,
340/870.11, 870.03, 870.19, 825.06

[56] References Cited

U.S. PATENT DOCUMENTS

Table listing U.S. Patent Documents with columns for patent number, date, inventor, and reference number.

Table listing Foreign Patent Documents with columns for patent number, date, inventor, and reference number.

FOREIGN PATENT DOCUMENTS

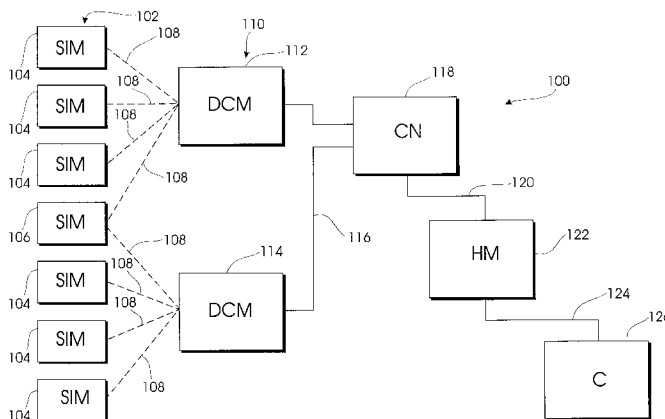
Table listing Foreign Patent Documents: 0629098A2, 2613739, 5/1994, 3/1976, European Pat. Off., Germany, H04Q 9/00, G01B 7/30

Primary Examiner—Brian Zimmerman
Assistant Examiner—Timothy Edwards, Jr.
Attorney, Agent, or Firm—Head, Johnson & Kachigian

[57] ABSTRACT

A wide-area remote telemetry system which monitors and controls remote devices by means of a information control system. The system uses a plurality of sensor interface modules which constantly monitor devices for triggering events. The sensor interface modules transmit information to at least one data collection module which gathers, process, stores and transmits information to a host system via standard external communication systems. The host module receives, records, processes, and transmits information to the network. The information may then be transmitted to customers or may be accessed by customers as desired.

2 Claims, 42 Drawing Sheets



Emerson Exhibit 1018

FIG. 1

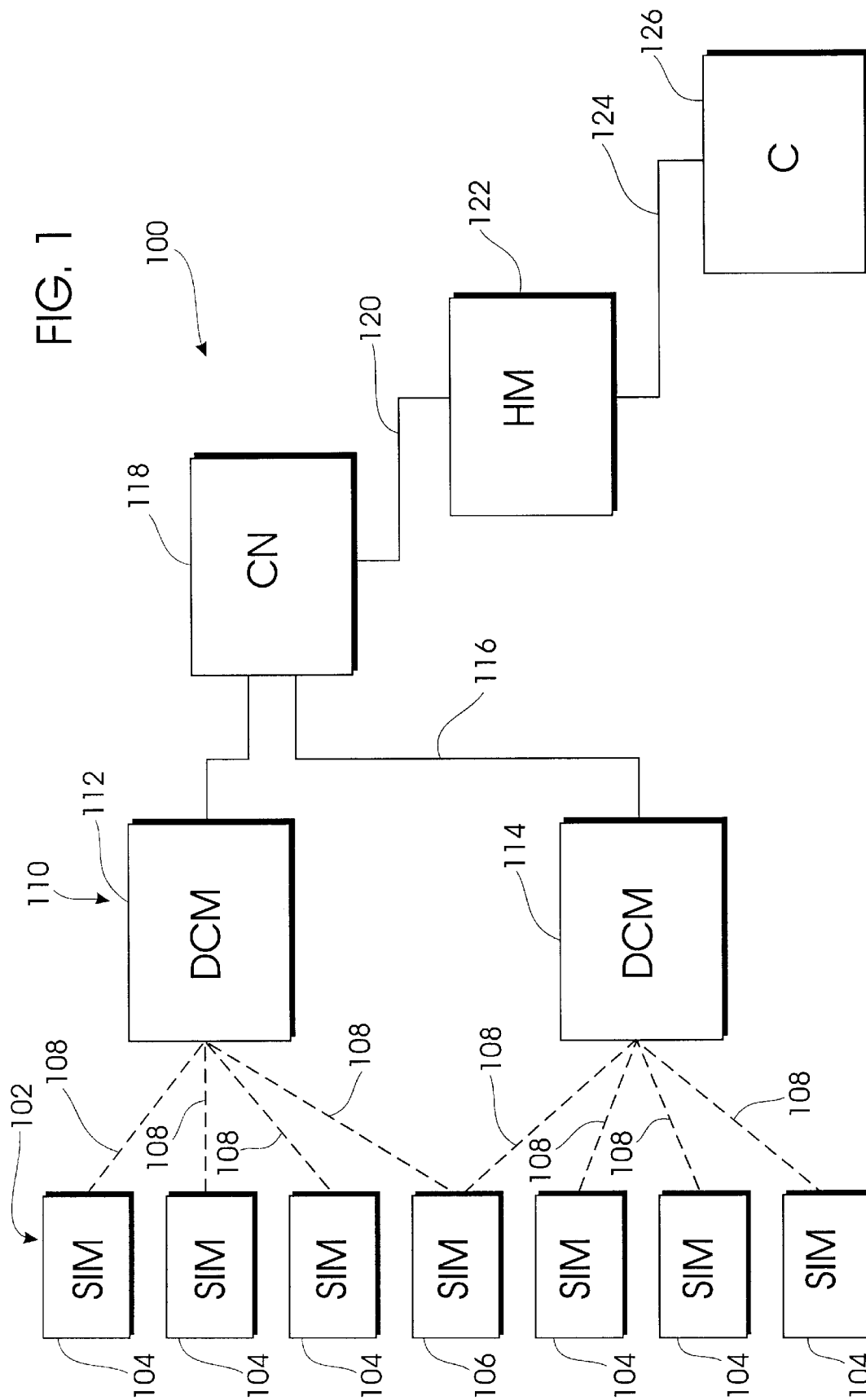


FIG. 2

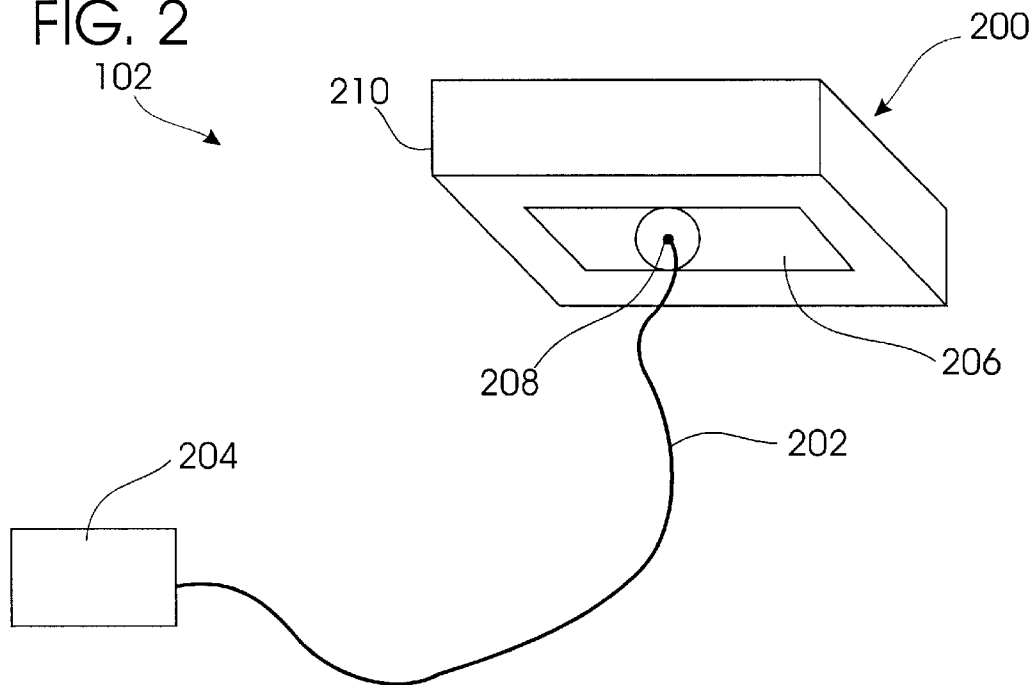
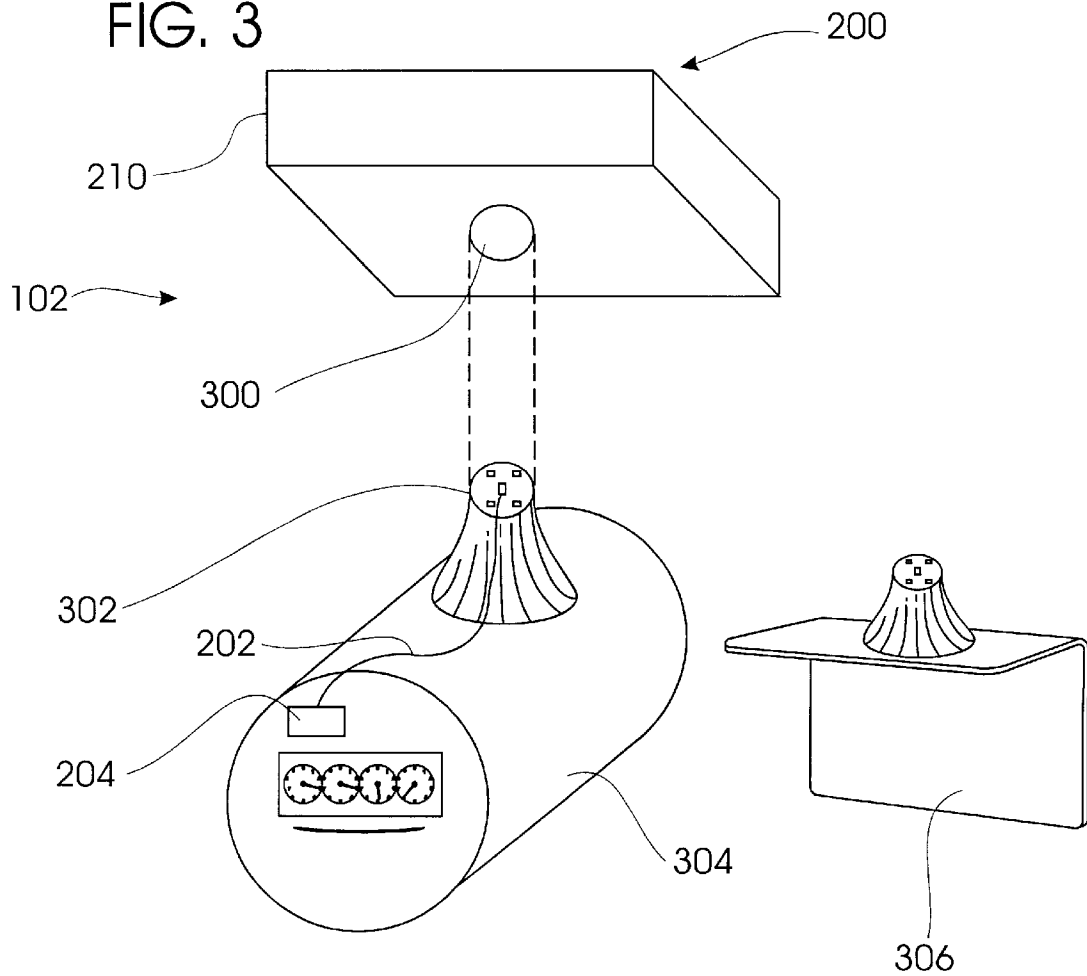


FIG. 3



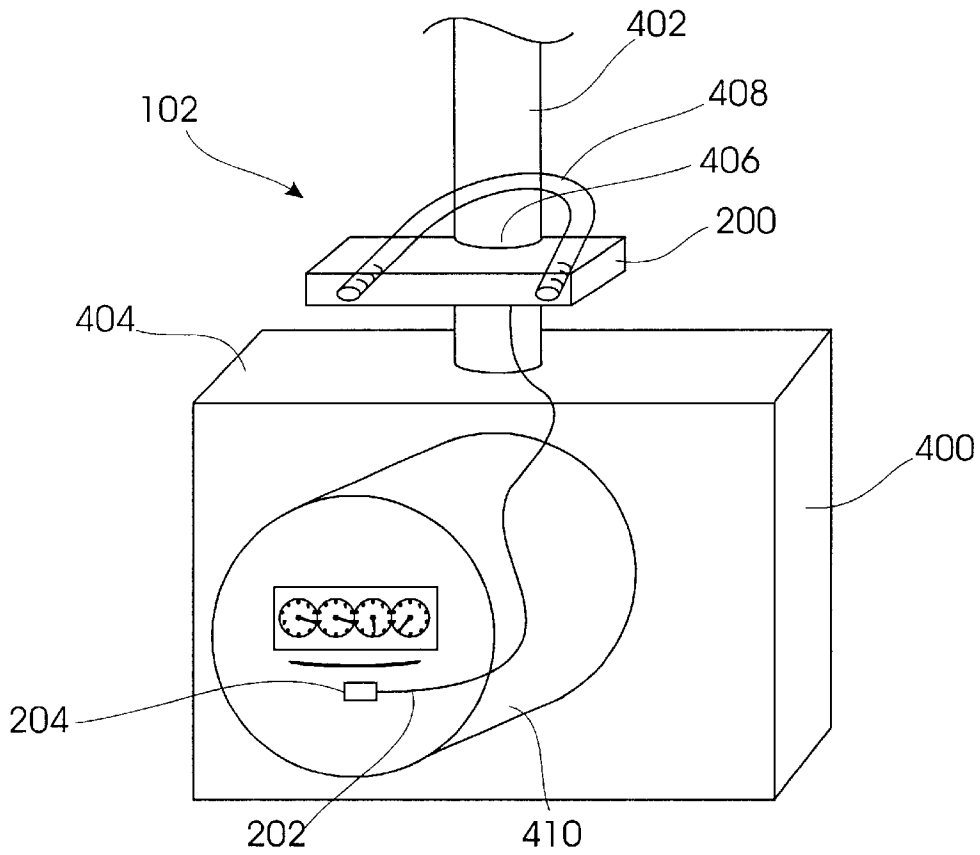


FIG. 4

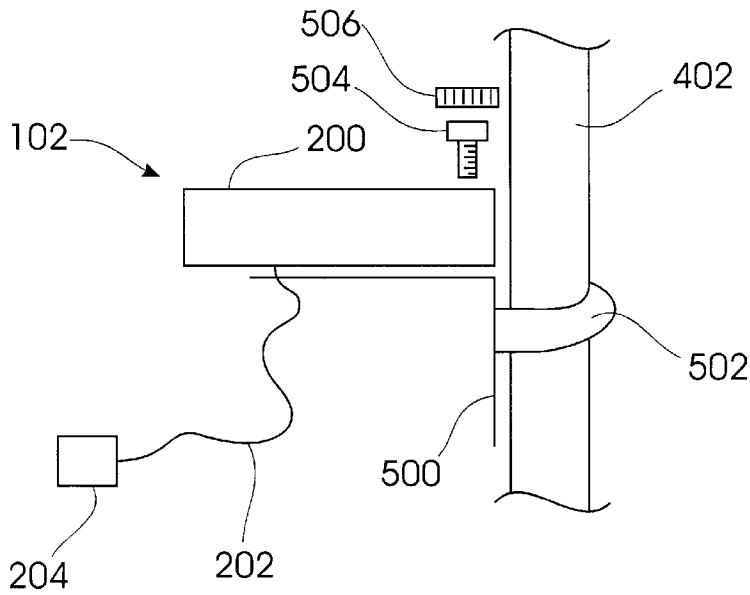


FIG. 5

FIG. 6

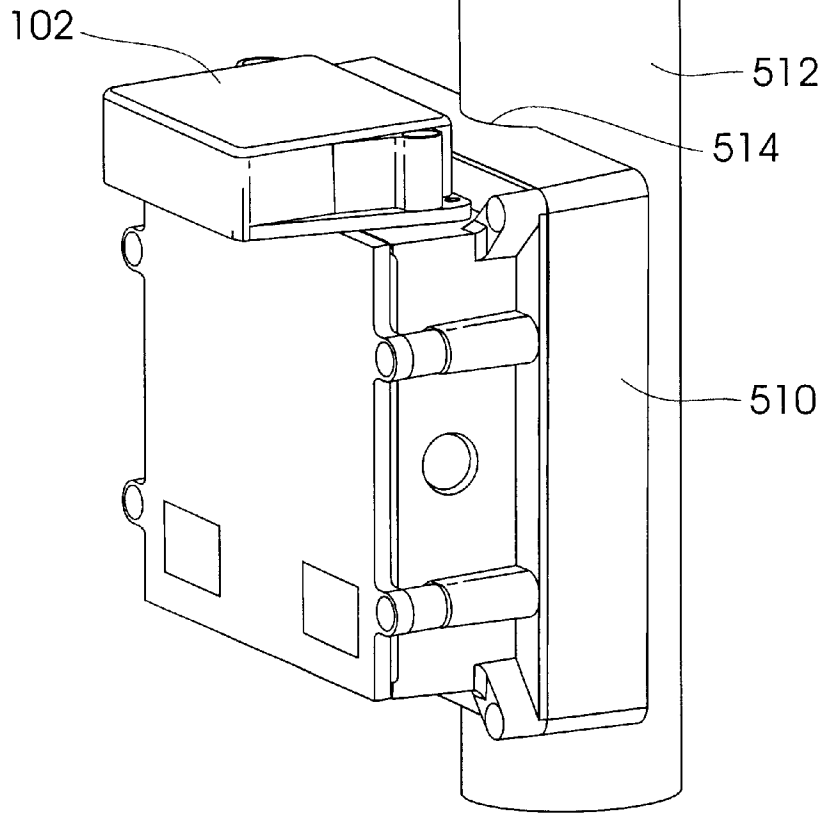
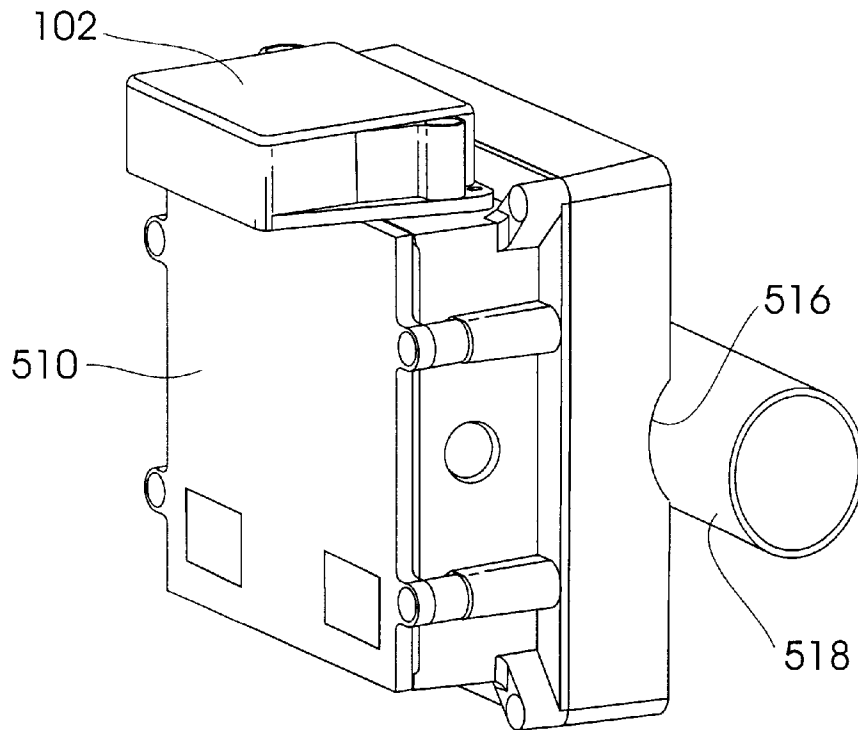


FIG. 7



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