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Obradovich et al.

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(54) **TECHNIQUE FOR EFFECTIVELY PROVIDING MAINTENANCE AND INFORMATION TO VEHICLES**

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(List continued on next page.)

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(*) 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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(21) Appl. No.: **09/622,869**

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(86) PCT No.: **PCT/US99/28848**

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§ 371 (c)(1),

(2), (4) Date: **Aug. 23, 2000**

(74) *Attorney, Agent, or Firm*—Kaye Scholer LLP

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(57) **ABSTRACT**

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In an automobile, communications to and from the automobile are in the form of messages. Such messages are referred to as "electronic car-mail" or "C-mail" messages as each message has a destination or origination address which includes an identifier, e.g., a vehicle identification number (VIN), identifying the automobile. The message may be delivered to the automobile from a remote server through a communications network, e.g., the Internet. One such message may contain a recall notice to the automobile. Another message may contain just-in-time map information for navigation, depending on the current location of the automobile. Yet another message may contain advertising information concerning selected entities, e.g., restaurants, gas stations, department stores, etc., also depending on the current location of the automobile. The messages transmitted from the automobile to the remote server may contain, e.g., GPS information identifying the location of the automobile, dynamic data furnished by sensors in the automobile for analysis, an odometer reading and a speedometer reading for records, etc.

Related U.S. Application Data

(60) Provisional application No. 60/113,397, filed on Dec. 23, 1998, and provisional application No. 60/117,958, filed on Jan. 28, 1999.

(51) **Int. Cl.**⁷ **H04B 1/06**

(52) **U.S. Cl.** **455/414.1; 455/412.2; 455/414.2; 455/345; 455/466; 340/7.35; 340/7.52; 340/286.14; 340/825.72; 340/995.12**

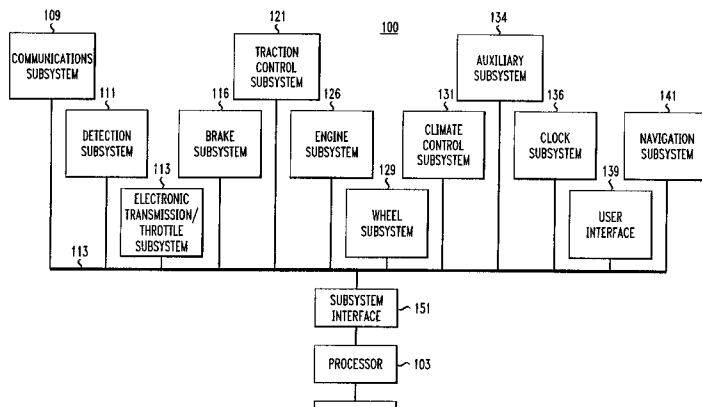
(58) **Field of Search** 455/96, 99, 345, 455/414, 422, 426, 466, 507, 556, 557, 412.2; 340/7.52, 7.31, 7.35, 286.14, 425.5, 426, 438, 457, 825.72, 825.52, 86.01, 994, 995, 988

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30 Claims, 7 Drawing Sheets



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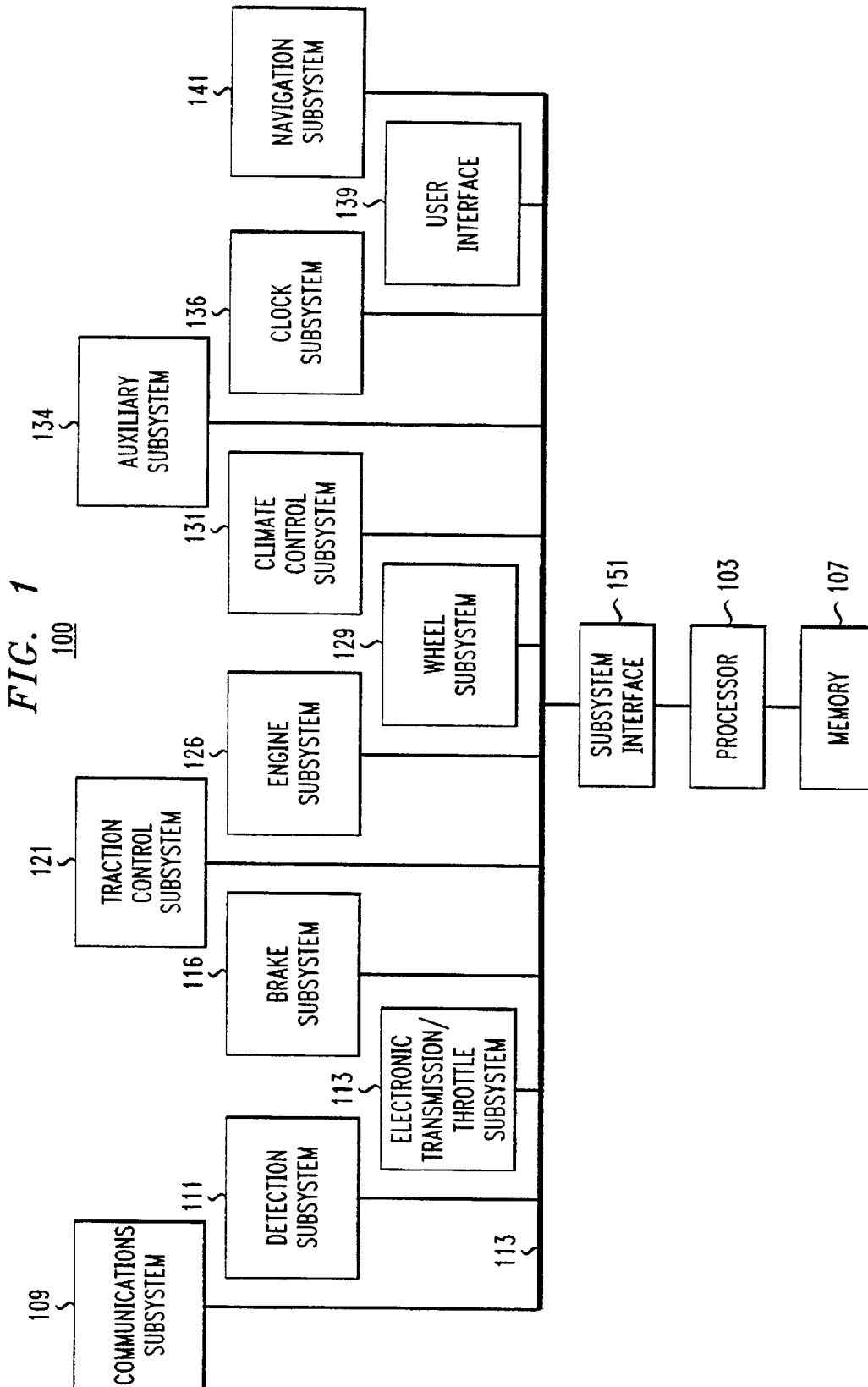


FIG. 2

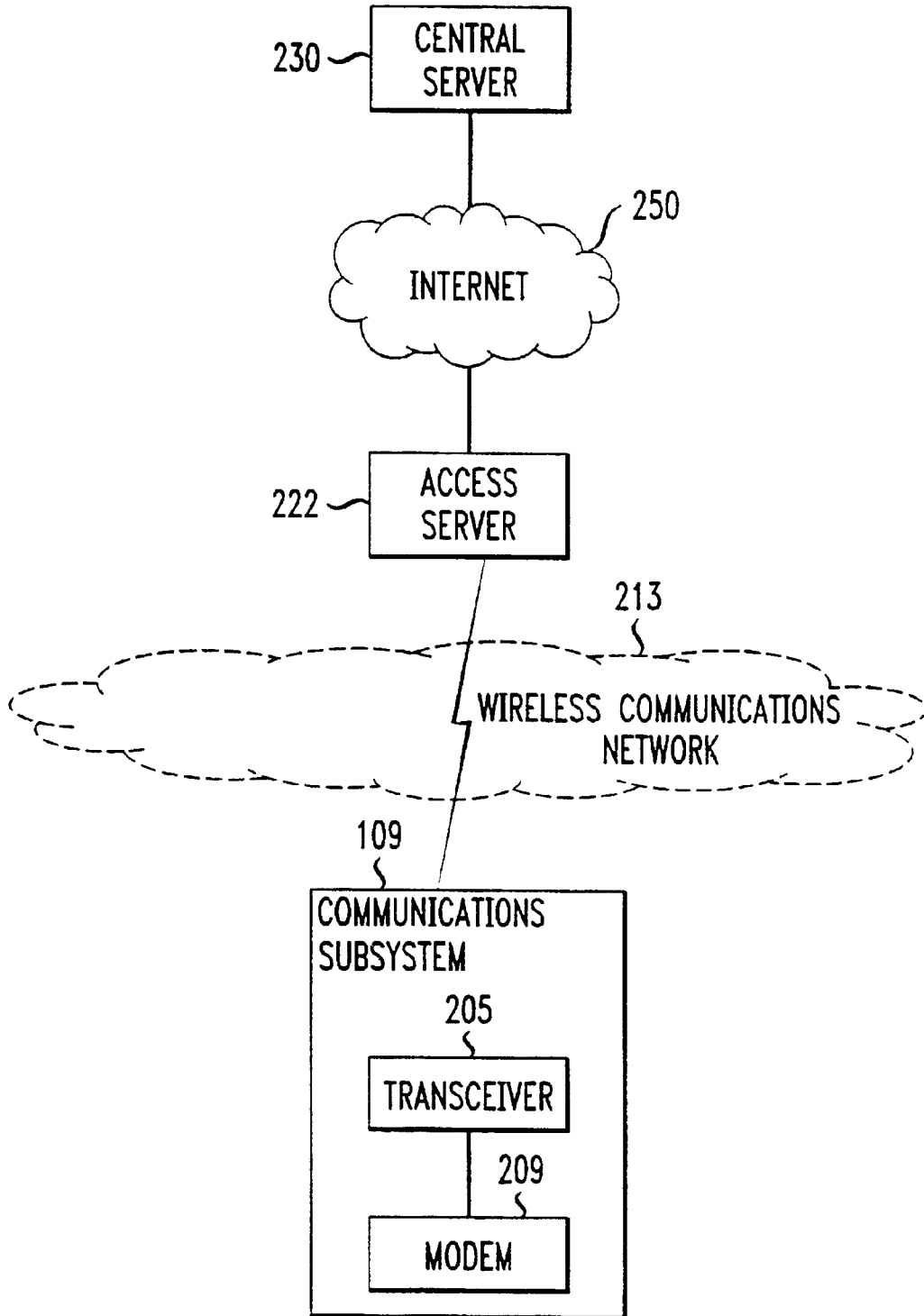


FIG. 3

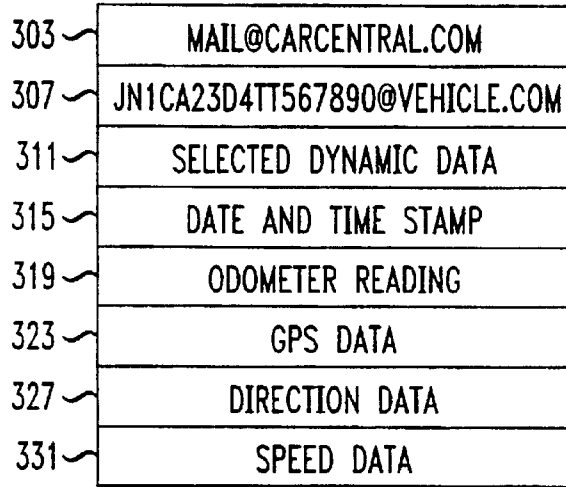
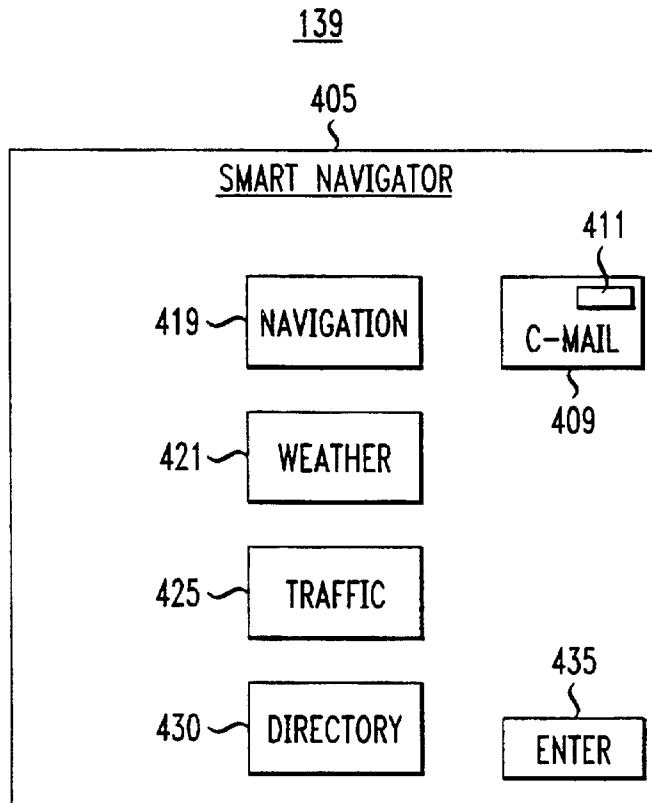


FIG. 4



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