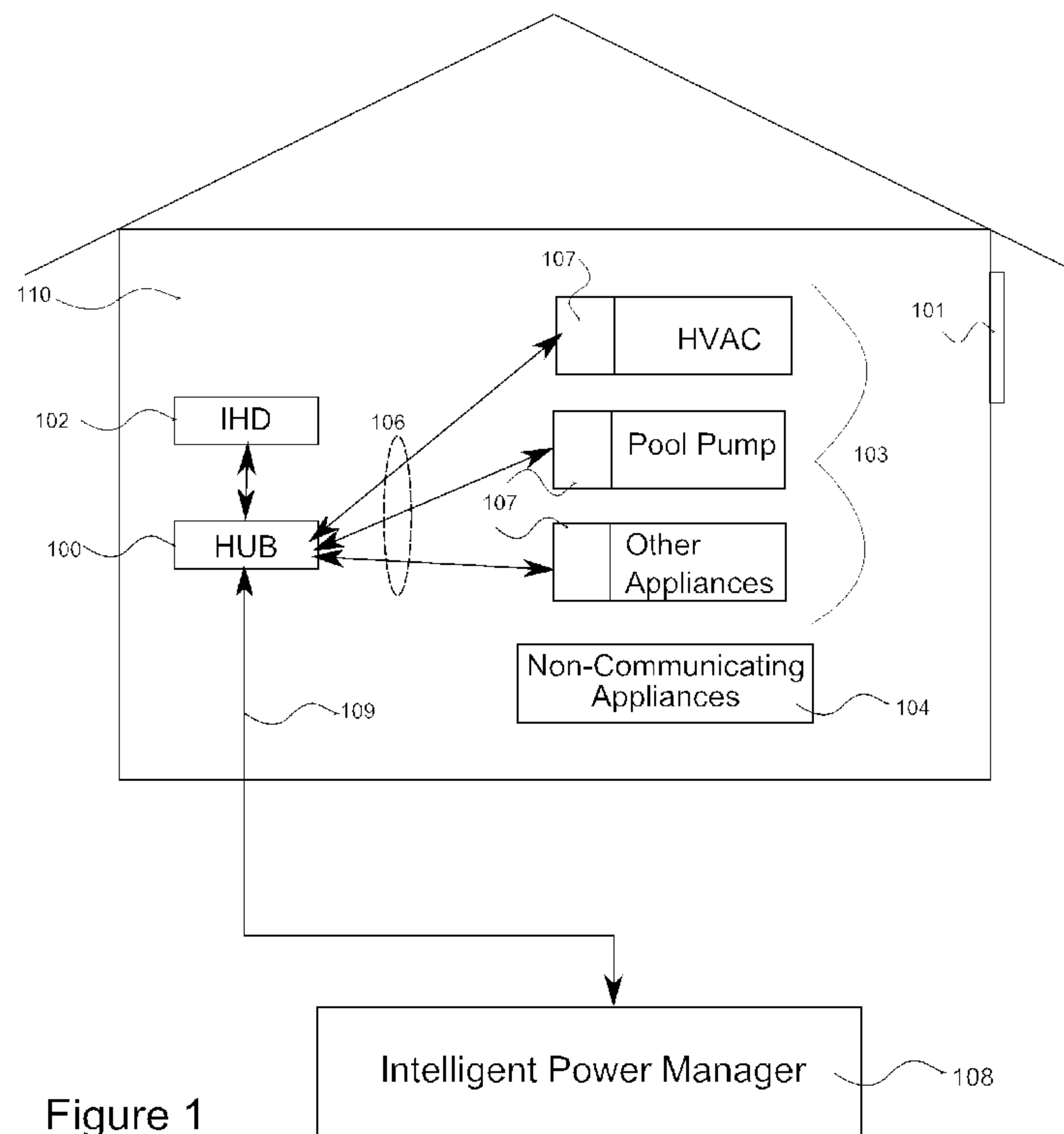




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(54) **Titre : PROCÉDE ET APPAREIL DE SURVEILLANCE ENERGETIQUE**
(54) **Title: ENERGY MONITORING METHOD AND APPARATUS**



(57) **Abrégé/Abstract:**

An In Home Display (IHD) device adapted to display electricity usage of a household in data communication with a Smartmeter and in data communication with an intelligent power manager. The IHD provides a channel for the transmission of household descriptive data to the intelligent power manager. The intelligent power manager communicates with a number of IHDs each associated with a respective household. The intelligent power manager will process and compare data from the IHDs prompting a householder to take actions based on said comparison.

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ENERGY MONITORING METHOD AND APPARATUS

TECHNICAL FIELD

The present invention relates to the field of energy demand monitoring and management.

5 BACKGROUND ART

The following references to and descriptions of prior proposals or products are not intended to be and are not to be construed as statements or admissions of common general knowledge in the art. In particular, the following prior art discussion does not relate to what is commonly or well known by the person
10 skilled in the art, but may assist in the understanding of the inventive step of the present invention, of which the identification of pertinent prior proposals is but one part.

In Home Displays (IHD) are devices which, at their most basic, display to a householder the amount of electrical energy being consumed by the household
15 at an instant in time. IHDs are becoming more common in homes as a way to illustrate to householders what energy they are using at a particular point in time.

The expectation has been that householders will use this information to change behaviour and appliance use habits in order to save energy and hence money.

20 However, it is a significant challenge for the householder to determine which devices are using the energy and then to use the information to change use habits to save energy.

Those with knowledge of the field believe that sustained behavioural change is not likely and thus the initial energy efficient actions of householders will at
25 some stage revert back to previous habits.

This may be in part because of the difficulty of making changes to habits without any motivation beyond monetary savings which are spread over a long period.

In preference the householder is prompted to change energy use behaviour, for example by setting a higher or lower set point temperature on an air-conditioning thermostat.

5 In preference the householder is prompted to install appliance management means, such a home automation equipment able to switch on and off appliances to a schedule which uses less electricity.

In preference the householder is prompted to replace inefficient appliances, such as older refrigerators, televisions and air-conditioning units which are very much less energy efficient than more modern devices of the same type.

10 In a further form, the invention may be said to lie in a hub for reducing energy use in a household which can receive data describing the aggregate energy use of the household and receive data describing the energy usage of one or more electrical appliances within the household the hub then being able to communicate the received data to an intelligent power manager adapted to
15 receive and compare such data from a number of similar hubs installed in other households.

The hub may use the data describing the appliance energy use, and the data describing the aggregate energy use to deduce household descriptive data which describes characteristics of the household, its energy use and its
20 makeup, and to communicate said household descriptive data to the intelligent power manager.

The hub may be further adapted to receive via a user interface, household descriptive data and to communicate said household descriptive data to the intelligent power manager.

25 The user interface may integral to the hub or may be provided by a computing device remote from the hub which is in data communication with the hub.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a diagrammatic representation of a household including the system of the invention.

