

ABSTRACT

SYSTEM FOR MONITORING WATER CONSUMING STRUCTURES
AND THEIR HEAT USE IN AN INDIVIDUAL UNIT OF A MULTI-
UNIT BUILDING AND A SYSTEM FOR BILLING THEREFOR

5 A system is disclosed for monitoring the use of
water in an individual unit of a multi-unit building
wherein the multi-unit building is supplied water
from a common source and the individual unit has a
plurality of water consuming structures each supplied
10 by one or a pair of water pipes supplied from the
common source. A monitor determines the volumetric
flow through each of the pipes, each of said monitors
and periodically transmits a signal encoded with the
volumetric flow of the pipe and the identification of
15 the individual unit in which the pipe is located. A
remote receiver receives the encoded signals from
each of the monitors and computes a total volumetric
flow of water for the individual unit for a selected
period of time. Additionally, continuous volumetric
20 flow through the pipe proximate the water consuming
structure during a predetermined period of time can
be predetermined time so that an alarm signal can be
transmitted in the event that it is determined that
flow to the water consuming structure has been
25 continuous for the predetermined time. The use of
heat energy in the water devices can be monitored to
define the heat energy use. A remote receiver
receives the encoded signals from each of the
monitors, defines a total volumetric flow of water
30 and /or total heat energy use for the individual unit
for a selected period of time, computes a water
consumption/heat energy charge and prepares and
forwards a bill to the individual unit.

Figure 6