

# A Patent on a Plumbing System?

ASPE recently received this e-mail from Australia:

*Apologies first, because you may not be the correct person to send this to. However, being in Australia I couldn't find anyone else in America listed on the Web.*

*I had a very interesting patent e-mailed to me today. Now, I'm no*

*patent lawyer, but the wording appears to be so open ended as to conceivably cover all possible plumbing situations. The claims section is apparently the important section that lists the "meat" of the patent (or so the Australian patents office told me).*

*I thought this may be of interest to*

*all plumbing engineers as it appears the patent has been applied for "all" countries. There is already a fair amount of discussion within the Australian plumbing industry.*

*Regards,  
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(54) Title: HYDRAULIC SERVICES FOR RESIDENTIAL AND HOTEL BUILDINGS

(57) Abstract: The invention provides a hydraulic service system for multi-level buildings. The hydraulic service system includes a sanitary plumbing service, a hot water service and/or a cold water service for residential and hotel buildings, and optionally further includes a storm water drainage system, a gas service and/or a fire service.

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## HYDRAULIC SERVICES FOR RESIDENTIAL AND HOTEL BUILDINGS

### FIELD OF THE INVENTION

The present invention relates to a hydraulic service system for multi-level buildings. The invention particularly, but not exclusively, provides a hydraulic service system including a sanitary plumbing service, a hot water service and/or a cold water service for residential and hotel buildings.

### BACKGROUND OF THE INVENTION

The provision of hydraulic services for multi-level, residential and hotel buildings represents a considerable expense in the cost of building construction, labour construction time and ongoing maintenance and running costs for completed buildings. Therefore it is considered that there is a continual need for improvements in the provision of hydraulic

service systems for residential and hotel buildings in high rise buildings in cities and resort locations. Use of sensitive design solutions can enable the provision of environmentally friendly hydraulic service systems. Advantages to be gained from innovative hydraulic contracting costs and time savings; reductions in the plant equipment required, a decrease in the maintenance of buildings, greater flexibility of design and wider options, and ultimately an improvement on the

### OBJECT

It is an object of the present invention to provide a hydraulic service system for a multi-level building, or at least to provide the plumbing systems.

*“Hydraulic Services for Residential and Hotel Buildings” is a 27-page-long international patent application. Pages 1–3 look like this.*

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### STATEMENT OF THE INVENTION

In one broad aspect of the present invention there is provided a hydraulic service system for a multi-level building including one or more service units selected from the group consisting of:

- a) a sanitary plumbing service,
- b) a hot water service, and
- c) a cold water service.

In a preferred embodiment the hydraulic service system includes the combination of a sanitary plumbing service, a hot water service and a cold water service. The hydraulic service system may further include a storm water drainage system, a gas service and/or a fire service.

The sanitary plumbing service is preferably a single stack inverted sanitary system for conveying waste liquid to a sewer. The sanitary plumbing service preferably has a substantial amount of the horizontal pipe work and fittings located within concrete slab floors of the building.

The hot water service preferably includes a centralised boiler feeding a main hot water distribution pipe extending to each floor of the building where hot water is required, whereby the hot water distribution pipe has a manifold at each floor for the supply of hot water to one or more rooms of the building. The hot water system distribution pipe preferably is insulated and fitted with a plurality of heat trace cables and thermostatic mixing valves connected to a centralised temperature control system. The hot water is preferably distributed to each room by a fully retrievable poly pipe installed in a conduit cast within concrete slab floors of the building. Typically each manifold on the hot water distribution pipe has a plurality of meters to individually monitor the water supplied to each serviced room, and the manifold and meters are installed in one central cupboard on each floor supplied with hot water.

The cold water service preferably includes a main distribution pipe extending to each floor