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(54) **SYSTEM FOR MONITORING THE LEAK TIGHTNESS OF A TANK**

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See application file for complete search history.

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(57) **ABSTRACT**

A system for monitoring the leak-tightness of a tank, which is filled with a liquid with a lower density than water. The system has a liquid drain pipe, with a container that has a bottom, which is integrated horizontally in the liquid drain pipe with a damming element, which divides the container into a partial area on the supply flow side and partial area on the drain side. A first vibronic measuring device with a first vibrating unit protruding into the supply flow side partial area of the bottom determines whether the density of the medium undershoots a specified limit. A second vibronic measuring device with a second vibrating unit, at a position not exceeding the level of the first vibrating unit, which detects whether the vibrating unit are covered with medium, and with an evaluation unit uses the measured values of measuring devices to determine whether there is liquid from the tank in the container.

8 Claims, 2 Drawing Sheets

